VISION ZERO
EDUCATION AND OUTREACH STRATEGY

JULIA GOULD AND RACHEL KEYSER

APRIL 2016

LADOT

VISION ZERO
LOS ANGELES | 2015-2025

TABLE OF CONTENTS

INTRODUCTION 3

METHODLOGY 5

LITERATURE REVIEW 6

INTERVIEW FINDINGS 16

- MESSAGING STRATEGIES 16
- COMMUNITY OUTREACH STRATEGIES 21

MESSAGING AND CONTENT RECOMMENDATIONS 31

NEXT STEPS 43

REFERENCES 44

APPENDICES 46

SECTION 1: INTRODUCTION

Acknowledgements

We would like to sincerely thank Nat Gale and Seleta Reynolds at LADOT for providing us with the opportunity to work on developing this strategy. A special thanks to Brian Oh for his project guidance and to Jacqui Swartz, Tim Black, and Chelsea Richer for their data support throughout the process. Thank you to members of the Education Subcommittee, Vision Zero Alliance, and all other interviewees for taking the time to provide their insights, which greatly informed the content of this strategy.

A Note from the Authors

Julia Gould and Rachel Keyser are Coro Fellows in Public Affairs with Coro Southern California, a nonprofit, nonpartisan educational foundation. The Coro Fellowship in Public Affairs is a nine-month, graduate level, experienced based program, cross-sectoral fellowship to train effective leaders in public affairs. Founded in 1942, with the goal of training young leaders to strengthen the democratic system, Coro has expanded its centers to six cities across the country, with the fellowship in public affairs running in five.

Executive Summary

This document outlines specific recommendations to guide Vision Zero's education and outreach efforts in Los Angeles. The strategy was developed through both qualitative and quantitative research methods, examining best practices around public outreach and road safety campaigns, technical collision data, and the experiences of Los Angeles stakeholders.

These findings indicate that a successful Vision Zero education and outreach strategy will use multi-faceted mediums, message-tested content, and will be grounded in behavior change theory to target high-risk populations and behaviors at both the individual and institutional levels. Mass-media and on-the-ground education efforts will need to be tailored to specific population segments based on campaign priorities and additional market research. Messaging content should stem from the underlying factors that drive dangerous behavior, as well as barriers to the successful adoption of Vision Zero core principles. Overall, the campaign should seek to not only raise awareness of Vision Zero, but change behaviors through shifting social norms around transportation and traffic safety.

While this strategy pulled heavily from best practices and the work of other Vision Zero focus cities, interviews with 46 Los Angeles stakeholders help make it specific to the lived experiences and cultures of the diverse communities in this city.

The strategy first overviews components from the New York City and San Francisco Vision Zero education and marketing strategies, best practices around road safety campaigns, and behavior change theories related to injury prevention. Next, the document outlines the main findings from stakeholder interviews with regards to messaging and outreach strategies. Finally, the report establishes a set of branding and message content recommendations, including a phased-in messaging strategy, core messages, and example advertisement sketches.

Introduction

Less than a year since Mayor Eric Garcetti's Executive Directive, Vision Zero Los Angeles is on the cusp of final development and implementation. As part of this directive, four subcommittees--engineering, enforcement, evaluation, and education--will be responsible for developing the content of the Vision Zero Action Plan to be released in August.

As a foundation for the education component of the Vision Zero Los Angeles Action Plan, this strategy is deeply grounded in relevant literature, collision data, best practices, and perhaps most importantly, first-hand experiences from Los Angeles stakeholders. Synthesizing and analyzing this data informed the following recommendations for a successful campaign specific to Los Angeles.

Although Vision Zero emphasizes a shift in responsibility from individual behaviors to city-driven policy, education and outreach to Los Angeles's diverse communities is nonetheless an integral component of achieving Vision Zero's goals in reducing traffic fatalities. When considering the slow pace of engineering improvements and limitations of enforcement measures, education and outreach efforts become all the more critical in immediately addressing traffic deaths and injuries occurring on our streets.

Guiding Principles

This education and outreach strategy is founded on three main purposes that guide both the content and mediums of messaging and education efforts. These purposes were created with the recognition that in order for Vision Zero to be successful it will need to encompass a multiphase *social marketing campaign* that addresses social norms around transportation and traffic safety.

Therefore, the education and outreach strategy will seek to:

1. **Increase overall awareness** of Vision Zero, the issue of traffic safety, and impacts of dangerous road behavior;
2. **Facilitate a Los Angeles culture shift** toward shared responsibility in road safety, the preventability of traffic deaths, and the idea that even one traffic death is unacceptable;
3. **Motivate safer traffic behavior** among all those who travel in Los Angeles, with emphasis on demographics most likely to exhibit dangerous behavior.

Vision Zero needs diverse forms of both mass-media messaging and on-the-ground outreach to increase awareness, change cultural norms, and change behavior. Social marketing campaigns (i.e. those that seek to change behavior by changing social norms) require extensive time and resources, however they are possible. Looking to the success of other public health campaigns such as anti-tobacco efforts in the United States , Vision Zero has the power to change the paradigm of traffic safety in Los Angeles, across the nation, and worldwide. This education and outreach strategy seeks to make Los Angeles a leader in this effort.

How to Use

The findings and recommendations from this document will serve as a reference for the communications consultant and education subcommittee in developing both the priorities and content of the media messaging. These recommendations should also be considered when creating content for the Vision Zero Action Plan, and in implementing on-the-ground outreach and education. While this strategy is specific to Vision Zero, the findings around

messaging and community outreach can be used as a resource for other education and outreach campaigns in Los Angeles.

SECTION 2: METHODOLOGY

We conducted in-depth interviews with 46 stakeholders from both within and outside of Los Angeles. Interviewees included:

1. Transportation experts
2. Communications specialists
3. City officials
4. Vision Zero Alliance members
5. Vision Zero Education Subcommittee members
6. Vision Zero Focus Cities

We chose these different groups of interviewees in order to have varying perspectives from people who work both in and outside of city government. As behavior change theory around public health suggests, we also wanted to include the perspective from community voices, especially those who have already been advocating for safe mobility. Finally, we spoke with experts who have worked on both private and public sector communications campaigns to learn from their experiences specific to Los Angeles.

Each interview lasted 45-90 minutes with the average interview lasting an hour. Interviewees were asked a common set of questions with variations and follow-ups as the conversation saw fit. For a full list of interview questions, please refer to Appendix D.

Our questions centered on the following topics: previous campaigns, message development and community outreach experience, message development ideas, and media/platforms. Our goals were to: 1) learn best practices from media safety campaigns they had previously worked on or had experienced, 2) to understand what would be the most effective messaging and outreach strategy for the community that they worked with, and 3) to solicit their own impressions on traffic safety and behavior change. Ultimately we sought to use these interviews as a way to develop a truly Los Angeles-specific Vision Zero education and outreach strategy that considered the needs, interests, attitudes, and values of Los Angeles' diverse range of constituents.

After compiling interview notes, (See Appendix E for Interview Notes) we then coded all of the interviews separately in order to deduce common themes. These themes were then cross-checked with each other and analyzed in order to find connections and discrepancies.

In addition to qualitative research, we also examined raw collision data from police reports made available to us by LADOT and Fehr and Peers. Using the program Tableau, we were able to draw conclusions from the various data sets on victims, collision profiles, and parties in order to focus our education and outreach strategies.

Finally, we supplemented the primary qualitative and quantitative data with a background literature review on other Vision Zero focus cities' work, behavior change theories, external collision data, and best practices around public outreach generally.

SECTION 3: LITERATURE REVIEW

Overview: New York City and San Francisco Vision Zero Education and Marketing Strategies

In reviewing prepared materials and speaking with representatives from several Vision Zero focus cities around the country, New York City and San Francisco stood out as currently having the most developed education and outreach strategies, as well as being the furthest along in their implementation. This section briefly overviews the main concepts from these two cities' plans, and outlines key takeaways for consideration in the Los Angeles strategy and its implementation.

New York City Vision Zero Marketing Plan

Following the city government's 2014 commitment to implement Vision Zero in New York City, their Vision Zero Task Force outlined a marketing strategy outlining how to pursue the "Vision Zero brand and its objectives." The plan briefly covers: results of various education efforts, earned media considerations, social marketing, and the timing and continuity of marketing. Most specifically, the plan covers target audiences, priority topics, and strategies for marketing. Key points from these three sections are summarized below, with some additional insight from a NYCDOT staff member. In 2014, the NYCDOT also released a "style guide" to help community partners keep consistent guidelines for communication and marketing around Vision Zero.

Target Audiences

Below are New York City's Vision Zero target audiences and reasons for prioritizing them.

Primary audience	
Adult male drivers, ages 20-50	• Most likely to kill or severely injure a pedestrian • Males in their 40s are most likely to be involved in a pedestrian KSI crash • Males 21-29 have highest rate of impaired driving
Secondary audiences	
Street users in priority locations	• Messaging will be most effective if targeted in corridors with highest rates of KSI collisions
Fleet operators	• The Taxi and Limousine Commission (TLC) licenses 120,000 professional drivers • With over 27,000 vehicles and 80,000 full or part time drivers, the City's fleet plays a critical role in Vision Zero • Private Fleets provide another opportunity for Vision Zero education

Large vehicle drivers	• Trucks and buses were involved in 24% of 2014's pedestrian fatalities (up from 18% from 2011-2013) • Approximately 45% of fatal bus and truck crashes involve turns within intersections
Motorcycle drivers	• In 2013, 42 motorcyclists lost their lives in traffic crashes • In 2014, 37 motorcyclists lost their lives, which is also the average of the three previous years
School-age children and their caregivers	• Being struck by a car is the most common cause of injury related death among children in New York City • Have a ready access point and partner; DOT worked with the Department of Education (DOE) to provide educational services at 620 elementary, middle, and high schools in 2014
Seniors	• People over 65 make up 12% of the city's population but 33% of pedestrian fatalities

*All data and statistics are specific to New York City.

Priority Topics and Strategies

The left column lists NYC Vision Zero's priority topics around traffic safety, while the middle column provides the specific behaviors associated with each topic. The right-hand column contains the marketing strategies being implemented to address each specific topic and its associated behaviors.

Priority topics	Specific behaviors targeted	Marketing strategies
Reckless driving - driver choices	• speeding • failure to yield	▯ outdoor media ▯ television ▯ interactive digital ads ▯ radio ▯ city-owned media ▯ bumper stickers
Pedestrian safety	Pedestrians: • mid-block crossings • watching for turning cars Drivers: • speeding • watching for pedestrians (particularly left turns)	▯ flyers ▯ schools outreach ▯ truck/bus visibility for schools ('trucks eye view' hands on demonstrations at select schools) ▯ Aging New Yorkers Outreach Plan (short film and materials targeting seniors)
Large vehicle education	• turning blind spots • interactions with pedestrian and cyclists • truck side guards • truck route compliance	• city fleet outreach (materials for drivers) • "Good Operator Awards" • truck association outreach (communications kit) • waste management outreach (communications kit)
19-190 Yield to pedestrians	• yielding to pedestrians	• print media (newspapers) • DMV buck slips and posters

		• VMS boards • city resources (websites, hold music, employee checks) • Awareness Day • Social media (week-long campaign)
25 MPH - Speed cameras	• speeding	• radio • speeding tickets (buck included) • November anniversary (press releases) • social media (week-long campaign with anniversary)
Motorcycle drivers	• safe driving practices • skills development	• viral video (with celebrity) • online media • DMV (buck slips) • flyers
Taxi and livery drivers	• speeding • failure to yield	• TLC training materials • technology for "safety" tip

Messaging

Taken from anti-smoking campaign best practices and focus group testing, the NYC Vision Zero messaging content focused on "graphic" images "clearly defining the consequences" of undesirable behavior. Focus group testing data discouraged humor in order for the public to "take it seriously."

Making it Community-specific

All photo and video work for the campaign was done in NYC, highlighting common neighborhood imagery. They used geolocating technology to associate specific facts and statistics to corresponding neighborhoods and boroughs, as well us translated messaging into relevant languages.

Message Testing

Focus groups were used for pre-campaign message testing, and random sample online testing was done post-campaign to test awareness, comprehension, and impact.

San Francisco Vision Zero Citywide Strategy for Education and Outreach

Developed by the San Francisco Vision Zero Education Subcommittee, this strategy outlines a ten-year education strategy to work in conjunction with engineering, enforcement, and data and policy subcommittee work. The plan focuses on "changing the culture of traffic safety" in San Francisco to address behavior change, with emphasis on "research-based, data-driven, and culturally competent" campaigns. San Francisco's Vision Zero education and outreach strategy was used as a basic framework for this document, specifically drawing upon the extensive research into best practices for road safety campaigns (see next section).

Four Main Areas of Focus

The SF strategy focuses on the following main areas:

1. <u>Brand identify/mission buy-in</u>

Brand focused on two core messages: 1) a significant, achievable goal that impacts all San Francisco residents and b) that each person in San Francisco has a role in helping achieve zero fatalities. The Vision Zero SF brand is the "entity" that embodies these two goals.

2. Multifaceted safety campaigns
   In addition to the Vision Zero brand awareness campaign, the city will need to continue and develop multi-year educational campaigns that target specific audiences and specific behaviors with an aim of reducing known causes of collisions that result in severe injury and death. Some will be Vision Zero branded, and some will "in support" of Vision Zero.

3. Multifaceted safety programs
   Support for standalone programs that support Vision Zero goals, for example, Safe Streets for Seniors program.

4. Engineering, enforcement and policy support
   Education and outreach efforts should coordinate with and complement these other Vision Zero elements.

Education Core Principals

1. Use San Francisco specific data analysis to inform education initiatives.

2. Utilize best-practices in road safety education as well as the efforts of peer cities pursuing Vision Zero when designing initiatives.

3. Rely on public health and communications theories to ensure that there is a broad, multifaceted program that impacts all aspects of San Francisco's traffic culture.

4. Develop program focus and messaging through target-audience research and interviews.

5. Develop campaigns in a culturally sensitive manner, including using multi-lingual materials and engaging community organizations whenever appropriate.

6. Focus on ensuring the safety of vulnerable populations and the areas of the City where education and outreach are needed the most.

7. Coordinate activities based on the same vision, objectives and data.

8. Utilize data and messages that are consistent with Vision Zero.

9. Are, as much as possible, coordinated with enforcement and engineering.

10. Evaluate programs in their formative stages and conduct impact evaluation to determine program effectiveness as is feasible and as funding permits.

External Goals for Education Subcommittee

1. Measurable shift in the understanding that each person using city streets has the ability to change behaviors to support the reduction in severe and fatal injury collisions.

2. Measurable increases in awareness of key traffic laws and requirements.

3. Measurable reductions in injuries and fatalities caused by speeding, vehicles making turns, pedestrians stepping into the paths of oncoming cars and bicyclists failing to yield and other factors as identified.

4. Measurable reductions in speeding on city streets.

Focus of programs and campaigns

1. Developing a common understanding that death on our streets is unacceptable and that each person has a role in ensuring it does not happen;
2. Establishing new expectations related to behaviors on San Francisco's streets that result in changes to the way that people travel and as a result, safer streets with fewer collisions and fatalities;
3. Influencing perceptions, beliefs, and attitudes;
4. Educating about risk and protection;
5. Increasing skills and knowledge;
6. Increasing support for and helping implement safety policies; and,
7. Helping leaders support safety issues and promote a commitment to safety.

Near-term Educational Actions: Core Program

The following programs are the core of the SF education strategy, and are directed to be implemented in the next 1-3 years.

Program	Overview
Vision Zero Brand Awareness Campaign	• high visibility, mass media advertising (radio, TV, billboards, social media, collateral materials) • grassroots community outreach • sponsorship at community events • community mini-grants
Safe Streets SF: It Stops Here	• maintain existing campaign focus on laws regarding crosswalk violations
Safe Streets SF: Anti-speeding	• 2-year funding request of ATP • partnership: SFMTA, SFPD, SFDPH • high visibility enforcement with HIN focus couple with media campaign on dangers of speeding
Safe Streets SF: Safe Left-turns	• media and community outreach on left-turn safety - one of top 3 dangerous behaviors • 2-year funding request of ATP • Partnership: SFMTA, SFPD, SFDPH
Safe Bicycle Behavior Education Campaign	• top dangerous biker behaviors: • failure to stop at limit line, falter to stay in lane, faultier to stop before entering crosswalk • partnership: SF Bicycle Coalition, city agencies • stakeholder outreach, grassroots engagement, mass media ads, direct education

Safe Pedestrian Behavior Education Campaign	• five most dangerous behaviors: • failure to yield to motorist, midblock crossing, running a red light, leaving the curb suddenly, violating traffic signal • integrated: Safe Routes to Schools, Safe Streets for Seniors • partnership: Walk SF, city agencies
Safe Routes to School	• currently funded through FY 17 • partnership of multiple city agencies and community organizations providing training to 40 public schools • expand program to reach additional students and program impact
Safe Streets for Seniors	• provide safety education through senior centers, organizations and housing • in partnership with engineering outreach activities and with existing SFDPH programs for seniors
Larger Vehicle Driver Training Program	• developing standards and guidelines for companies that operate fleets of larger vehicles • training video and curriculum for drivers
Taxi training	• developing standards and guidelines for professional taxi drivers • video to be implemented into existing taxi training program

Engineering, enforcement, and policy support	• sees these efforts as "teachable moments" to help with education
	• support for materials development
	• SF Street Team
	  • "Guide to SF Streets" booklet
	  • education specific to engineering treatments

Programs for Consideration for Long-term Action

Permitting additional funding and research, the following actions are first priority for consideration after the near-term actions listed above:

- Visitor and commuter campaigns
- Expanded school programs
- Taxi and TNC related programs
- Internal/Staff programs
- Grassroots and Outreach Activities (additional)
- Other local safety campaigns (DUI, public health focus)

Outcomes:

- Increased public awareness and understanding of Vision Zero as city's commitment to eliminate traffic deaths
- Increased belief that SF street travelers can play a part
- Measurable decrease in dangerous behavior related to traffic deaths
- Increasing understanding and support for engineering treatments
- Increased capacity of stakeholders to inform and educate

Key Takeaways from NYC and SF Strategies

No two cities will implement Vision Zero in the same way, given the diversity and complexity of different populations, geography, differences in traffic data, etc. However, here are some of the key takeaways from the NYC and SF education and marketing plans that can be applied in practice in Los Angeles:

- Strategies should be data and research-driven in their development, including: best practices from previous road safety campaigns, best practices around public health outreach, behavior change theory, and message testing
- There is disagreement over the effectiveness of different kinds of messaging (i.e. positive, graphic, fear-based, etc.); messaging content should be focus-group tested and specific to the particular city and its communities
- Strategies should include a variety of media and on-the-ground community outreach and education tactics, aimed at different levels population segments (including public "influencers")
- Strategies should maintain core messaging throughout tailoring to different audiences
- Cities should take advantage of their own resources (agency resources, free ad space, etc.)

Best Practices for Road Safety Campaigns

Below is a summary of the San Francisco Vision Zero Education Subcommittee's literature review of over two dozen peer-reviewed journal articles on road safety campaigns and health communication generally.

San Francisco Road Safety Campaign Literature Review Summary

<u>Main goals of road safety campaigns:</u>

1. To raise awareness of an issue or to inform
2. To change attitudes
3. To change behaviors
4. To decrease the frequency and severity of accidents

<u>Characteristics of successful road safety campaigns (in no particular order):</u>[1]

- Are supported by other actions (legislature/policy, enforcement, rewards, incentives);
- Are based on behavior change theory;
- Break audiences into groups and tailor messages so they appeal to the different group;
- Address the existing knowledge and beliefs of target audiences that impede adoption of desired behaviors;
- Present information in line with social trends, behavior patterns or lifestyles;
- Use realistic, credible messages;
- Present the message in an unusual, new manner;
- Repeat a single message;
- Involve prior qualitative or quantitative research including pre-testing and focus groups;
- Evaluate and improve the campaign while it's being implemented;
- Use different interventions simultaneously;
- Set fairly modest, attainable goals in terms of behavior change;

[1] See reference 4, 13, 14, 20, 22, 26.

- Focus on the availability of products and services that support behavioral change;
- Utilize "media advocacy" or using the campaigns to achieve a policy change;
- Use commercial marketing and social marketing strategies.

Factors that diminish the effect of a road safety campaign are (in no particular order):[2]

- Conflicting messages;
- Delivery by source(s) lacking credibility;
- Inadequate exposure to campaign messages due to infrequent presentation and poor placement;
- Hostile message environments in which messages promoting change are outnumbered by competing messages that urge the continuation of existing behaviors;
- Insufficient training of the target audience on the skills needed to start and maintain the desired behavior change;
- Insufficient financial support for the campaign;
- Use of inappropriate or poorly researched format (e.g., boring factual messages or age-inappropriate content).

Road safety campaigns are generally more difficult than commercial campaigns because they seek to change behavior with complex variables. They must be more creative and nuanced because they have to develop a brand and involve negative demand with a small budget.

Tailoring Messaging

The better the messaging is targeted to different segments of the population, the more effective the campaign will be. Segments should be based on attitudes, values, and beliefs.

The following principles should guide decisions concerning segmentation:

- those with the greatest needs (according to crash data)
- those most ready for action and able to respond
- those easiest to reach (but this should not be at the expense of those most at risk who are difficult to reach)
- those that are the best match for the organization developing the campaign in terms of expertise and resources.

While messages may be tailored to different audiences, they should remain part of the same key core messages grounding the campaign.

Message Effectiveness

Because road safety campaigns seek to change a behavior, ads must not only be remembered, but be remembered for the *behavior being advocated.* Make sure the messages are clear, concise, and credible in order to best transfer memory into action.

People have a "psychological immune system", meaning they tend to ignore or rationalize information that makes them feel vulnerable or threatened (e.g. *That would never happen to me, I'm a careful driver.)* The best way to bypass these biases is to make sure the message is credible, meaning reflecting the beliefs and experiences of the target group, so they will personally identify with the character and associated behaviors.

[2] See references 22, 29.

Stressing the positive effects of desired behavior rather than negative consequences of undesired behavior helps make the content more relatable. Researchers have found that messaging that portrays undesirable behavior can potentially normalize that behavior. "Priming" the audience with words, images, or phrases that emphasize the benefits of desirable behavior is more effective. For example, a speeding campaign should not carry the message "if you drive too fast you will be involved in a crash, be fined, and cause serious pain and damage." Rather, it should have a positive tone, and carry the message "'obeying the speed limit is safe, it is relaxed, takes less fuel, and most people roughly keep to the speed limit anyway." Positive, emotional, and actionable ads have the most inherent appeal.

Providing a positive alternative to the undesired behavior is also an effective strategy for making the message more relatable. For example, focusing on having a "plan B" instead of driving home after drinking. This may be more difficult with behaviors like speeding, and should be message tested in focus groups to determine specific applicability.

Best practices research suggests that fear-based messaging may motivate people, but may also trigger defensive responses. Audiences may avoid the message because it's perceived as too overwhelming or they feel hopeless. If one does use fear-based messaging, it should be credible and propose a positive solution.

Messaging Exposure

Health messaging advocating for behavior change tends to be well known and largely ignored, and too many ads can seem patronizing. New research suggests that it is best for all target audiences see ads at least once, and the goals is for as many to see messaging as is affordable. Most experts suggest three to ten exposures as the most effective exposure rate. Over ten exposures is too much and over fifteen can results in negative reactions. Repeated cycles of short-term mass media exposure has been found to be effective.

The Role of Enforcement in a Successful Campaign

Enforcement best enhances the effectiveness of messaging when targeting compliance-based behaviors like speeding, failure to yield, and drinking and driving. Enforcement can also overcome feelings of being patronized in the target audience. Finally, information alone is more likely to influence behavior based on deliberate choices as opposed to habitual behavior, like wearing (or not wearing) a seatbelt, speeding to save time, or driving after drinking. In these cases, the most effective change strategies impede performance of the established behavior (through punishment or rewards) while facilitating formation of new behaviors into habits.

<u>When to link enforcement with education:</u>

1. If enforcement of compliance is possible, such as with speeding, failure to yield and drinking and driving. Less visible behaviors like fatigue are harder to combine with enforcement and may benefit more from messaging alone.
2. If a law is well known but not being followed.
3. If a campaign can lead to feeling of being patronized.
4. If the behavior in question is habitual.

Target Audiences

Behavior change can happen through direct exposure to messaging or indirect exposure by the conversation sparked from messaging. In order to change social norms, behavior change theories encourage targeting multiple levels of audiences: individuals, communities, institutions, organizations, decision-makers, and social networks. Transportation is a unique

public issue area as nearly everyone engages in it. This means there is an increased likelihood of indirect pathways influencing behavior change. Large-scale mass media campaigns with high population exposure can be particularly effective at influencing the overall population response and awareness to road safety.

The information transmitted through road safety campaigns has been shown to:[3]

1. Contribute to an increase in knowledge and a change in attitudes;
2. Increase the perception of the likelihood of detection and punishment;
3. Contribute to the acceptance of unpopular but effective measures such as enforcement;
4. Help place the issue on the social agenda, which can help drive legislation or generate public support for road safety programs;
5. Lead to the emergence of new social norms.

Also important to note is that road safety offences occur within a social context—we rarely travel in isolation, but rather share the road with others. It's impossible to be anonymous. This "social regulation" means that there is great potential for factors like norms and attitudes to affect a person's decision to commit an unsafe road behavior. Traditional legal sanctions are important, but the indirect pathways should not be underestimated.

One the most important lessons from this research is the importance of grounding road safety messaging in behavior change theory in order to maximize effectiveness. Prominent behavior change theories related to public health outreach are overviewed in the next section.

Behavior Change Theories

Best practices research encourages grounding Vision Zero in widely studied theories of behavior change. There has been a history of ineffective behavior change attempts around road safety in particular.[4] However, behavioral science has increasingly emphasized and integrated injury prevention initiatives over the past few decades. Growing research shows that targeted approaches to injury prevention that are based in behavior change theories are more effective in reducing the risk of dangerous behaviors.

There is no one dominant theory of behavior change in the public health field. Researchers advocate simultaneous use of multiple theories, with emphasis on those that apply most specifically to the particular campaign context (i.e. topic, demographics, place, etc.). See Appendix A for an overview of behavior change models and concepts related specifically to injury prevention and public outreach.

SECTION 4: INTERVIEW FINDINGS

Findings from our interviews with 46 stakeholders reveal a common set of themes around the current landscape of dangerous traffic behavior within Los Angeles, as well as effective messaging and outreach practices that will work to achieve the goals of the education and outreach strategy. They also emphasize equity and cultural relevancy considerations that Vision Zero must take into account if it is to be successful. Finally, the data suggests how Vision Zero should move forward in facilitating and leveraging effective partnerships both between agencies and sectors.

Messaging Strategies

[3] See references 6, 13, 22, 26.

Modal Conflict

Almost all of our interviewees expressed the "inherent conflict" between moving cars as fast as possible and moving people safely. They cite that within the post-war period, much of Los Angeles was built with the automobile in mind, with wide, six-lane streets meant for speed, freeways cutting through neighborhoods, narrow sidewalks, and nonexistent bicycle facilities. In recent years, there has been a culture and policy shift towards prioritizing active modes of transportation such as walking and bicycling, however much of the infrastructure continues to reflect previous eras and there is still a great concern over congestion.

The clash between people and cars is evident in community debates around traffic-calming measures such as the road diet on Rowena Ave in Silver Lake. However, recent increases in traffic fatalities has galvanized many groups to say "enough is enough," we need to do more to move people safely. Several of our interviewees expressed that if we make the road safer for pedestrians and cyclists, the roads will become safer for everyone.

➽ Strategy 1.0: Vision Zero messaging should consider the vehicle-centric nature of Los Angeles as well as the conflict between moving cars fast versus moving people safely.

Norm Change

An overwhelming majority of our interviewees expressed that for Vision Zero to be successful in Los Angeles we will need to change social and cultural norms around traffic behavior and traffic fatalities.

A messaging strategy that seeks to shift social norms is referred to as a "social marketing campaign." A social marketing campaign differs from a traditional communications campaign in that it is not focused solely on consumer choice--where you tell someone to do something or increase brand appeal, but is rather about changing what is socially acceptable within a community. Many interviewees cited anti-tobacco campaigns in California as successful examples of social marketing. The messaging changed what people accepted as normal and created an environment where it has become less socially acceptable to smoke in California.

As in the case of tobacco, these cultural shifts take years and are more successful when paired with effective policies such as anti-smoking laws in restaurants, parks, cities, etc. In order to be successful, the message must also get to the root of why people should care about the issue. A successful norm change campaign for Vision Zero would seek to promote the ideas that Los Angeles is a place where traffic deaths are unacceptable and preventable.

➽ Strategy 2.0: Messaging should be part of an overall "social marketing campaign" that seeks to change social and cultural norms around transportation and traffic safety.

Core Messages

At the heart of this social marketing campaign, there needs to be strong universal messages addressing why people should care about traffic fatalities and Vision Zero. While not the specific language used for public messaging, these core messages are the foundation for the campaign. The messages are simple and can address both why people should care and potential barriers to their interest or participation in Vision Zero. Each message is simple yet broad enough to be substantiated in various ways depending on the target communities, cultures, and lifestyles. This tailoring will be especially important in Los Angeles, considering

differences in current perceptions of traffic safety (shaped by an individual's neighborhood, communities, primary mode of transportation, country of origin and so on).

- Strategy 3.0: The campaign should have a set of simple and universal core messages that serve as a foundation for all messaging, and can be substantiated in many ways depending on the audience.

Segmentation

Segmentation of the population into different audiences is critical to understanding who your audience is and how to tailor the core messages accordingly. Interviewees discussed various ways to segment the population. One way is to segment based on the collision data in which audiences are determined from those categories with the highest incidences of collisions and in accordance with LADOT's prioritization metrics. This would include: 1) pedestrians 2) bicyclists 2) children 3) seniors, and 4) male drivers ages 18-54.

While the above approach is data-driven and addresses those who are most likely to be involved in a collision, these groups are still too broad for targeted messaging. Because the demographic data from police reports is limited, the next step would be to further segment based on lifestyle, for example how often they use certain modes of transportation versus others. An example of this type of segmentation within pedestrians: 1) recreational walkers 2) joggers 4) daily walkers 5) public transit users. For male drivers: 1) daily drivers 2) weekend drivers 3) professional drivers. This will allow for a better understanding of the differences in how each segment will be reached. For example, a daily driver may be best reached through the radio or a billboard, while a public transit user may be best reached through signs at bus stations and on their smartphone.

If further demographic or geographical data permits, these segments can then also be layered with a multicultural and community centered approach. For example, if Chinatown has a high number of pedestrians collisions, the message should be framed around the types of pedestrians within Chinatown and the best way to appeal to this group that is both culturally and contextually relevant. More discussion on social equity will appear later in this section.

Often, there will be overlapping segments such as those who drive sometimes, but also ride their bicycle recreationally on the weekends or occasionally to work. A messaging strategy should actively try to find where these overlaps exist in order to efficiently reach the largest audience possible with a single message and medium.

A final segment to take into account when developing the messages and determining their modes are the individuals' proxies. Many of our interviewees commented that people often do not care about their own mortality or find ways to rationalize it by saying *that will never happen to me.* When this occurs, sometimes the most effective way to change behavior is through communicating to their family members, significant others, friends, or peers, who can then move the individual to stop the dangerous behavior.

- Strategy 4.1: The campaign should tailor messaging to segmented target audiences.
- Strategy 4.2: Audiences should be first segmented based off the campaign priorities, and then further using additional lifestyle and demographic characteristics.
- Strategy 4.3: Segmentations should be as specific as data and resources will permit.

- Strategy 4.4: When applicable to particular segment and behavior, messaging should target individuals exhibiting dangerous behaviors as well as those close to them.

Framing

Once the segments for Vision Zero messaging are identified, the task then revolves around framing the messages in a way that is relevant to those segments. The ultimate goal here is to change their attitudes about traffic related fatalities and their own behavior accordingly, as well as support policies and infrastructure that seek to reduce fatalities.

Quality of Life

Almost all interviewees emphasized quality of life as a central concern that was universal to every demographic and geographic group within Los Angeles. They stressed that in order for people to care about Vision Zero, the messaging had to directly relate to their lives. Quality of life directly pertains to issues like public safety, commutes, children, and the quality of the built-environment.

Family

Another universal theme which resonated with almost every interviewee was the importance of family. As mentioned earlier, people worry more about their family than they do themselves, so framing a message such as "drive like your family lives here" or "that bicyclist is your family member" might effectively remove the attachment people feel towards others on the road by personalizing it to those they care about.

Children

Children were viewed by many as a strong emotional touch point when messaging to communities about the importance of traffic safety. As one interviewee noted, "people just want to make sure their children can cross the street or walk safely to school."

Power of Personal Stories

Many of our participants noted the power of personal stories in getting people to listen and care. They argued that although statistics can be shocking to some, often times people do not really know what they mean. If you can put a face to a statistic about someone who lost a family member or even within a positive light about someone who cycles to work everyday then you will be more successful at connecting with a broader audience.

Why Should You Care?

No matter the message, interviewees stressed the need to make people understand why they should care about Vision Zero. One interviewee noted, "at the end of the day, no one wants to get into a car accident, give people more reasons to understand why not so the issues is at the front of their minds." That way the messages can "insert themselves into the moment of decision-making" before someone pulls out their smartphone to send a text or speeds down a street because they are late for work. The goal is to get them even for just a moment in time to stop and think before making that decision.

- Strategy 5.0: Messaging should framed in a way that makes it personal to the targeted audience and addresses why they should care.
- Strategy 5.1: Using themes relating to quality of life, family, and children are the most effective ways to personalize messages.

➽Strategy 5.2: Messaging should use personal stories whenever possible to humanize data.

Medium Types

Messaging mediums should be tied to the content by considering how each audience segment will most likely see or hear each message. For example, bus shelters and bus ads are logical pairings for messaging targeting pedestrians, while freeway billboards and rush hour radio spots should be tailored toward commuters. Billboards and bus shelter ads in areas with many bars and clubs might find an appropriate audience for anti-drinking and driving messaging. A comprehensive campaign will also incorporate non-traditional mediums like printing messaging on objects (e.g. coasters, water bottles, coloring books, etc.) or organizing public performances (see Non-traditional Campaign Ideas).

While it may be resource-intensive, doing market research into specific groups is necessary for effective with tailoring. For example, the research might reveal that "radio spots on these specific podcasts will target white, male cyclists between 25-35." Social media advertising should be effectively tailored with services like Nationbuilder, for both demographic factors (e.g. age, gender, etc.) and lifestyle factors (e.g. use public transit, tend to go out on the weekends, etc.).

Whether it be the result of market research or common sense, best practices encourage establishing logical pairings to tailor messaging to different population segments to make the messages stick. Considering the resource limitations, particularly with mass-media advertising, priority should be given to largest segments within Vision Zero priorities.

➽Strategy 6.0: Tailored messaging content should utilize the most logical medium for that population segment, based on how they are most likely to be exposed to messaging

Earned Media

While much of the Vision Zero messaging will be disseminated through purchased media, many of our interviewees discussed the cost-efficiency and publicity advantages of earned media (i.e. any free exposure or media coverage resulting from other campaign efforts). Media might be earned through submitting op-eds, or press releases or online videos that are widely shared and lead to news coverage by major outlets. Viral social media content can also contribute to earned media.

➽Strategy 7.0: Whenever possible, Vision Zero should utilize earned media through staged events, press releases, social media, and other tactics.

Non-traditional Campaigns

Many of our conversations with communications specialists looked at the growing prevalence and power of non-traditional campaigns as a way to communicate messages to the public. Non-traditional campaigns consist of any public installation or event that seeks to communicate to the public while also maximizing potential for earned media. This includes but is not limited to flash mobs or performances in the street, actors speaking to residents, pop-up art installations, and community murals. One peer city example of this is Washington D.C. DOT who is in the process of commissioning a mural, which would raise awareness about street harassment (for more, see Non-traditional Campaign Ideas).

- Strategy 8.0: Vision Zero should strategically invest in non-traditional campaign tactics to gain earned media, and contribute to the overall theme of innovation and creativity associated with the campaign brand.

Competition

It is important to acknowledge the advertising landscape to see what the messaging will be competing against, and when a campaign will have the most potential for success. Some considerations include the upcoming June and November elections and the holiday season, in which air time will be expensive and saturated with advertisements. Additionally, private companies are adept at disseminating and marketing condensed and targeted messages to many different audiences.

For these reasons, our interviewees emphasized the importance of simplicity in Vision Zero messaging. They noted that people are exposed to so many messages throughout their day that they do not have the time or energy to read everything. Moreover, messages should be communicated in terms that can be understood by everyone and should avoid any technical transportation or public health terms such as "data-driven, prevalence, outcomes, countermeasures, infrastructure, or bike facilities" just to name a few.

Additionally, for different age groups such a youth, seniors, and non-native English speakers, there may be varying levels in literacy and English reading capacities. In such cases, images or visuals which communicate the desired message or concept without compromising its integrity may be the solution. As one interviewee noted, "images unite where words tend to divide." Language accessibility will be discussed further in the community outreach section.

- Strategy 9.1: Media purchasing should be strategically scheduled to achieve maximum efficacy.
- Strategy 9.2: Messaging should use simple, public-facing language and avoid using technical terms.

Message Testing

Message testing should incorporate both random-sampling surveying and focus groups. Lessons learned from previous outreach campaigns reveal that surveys with larger sample sizes will help inform more generalized reactions to the content (e.g. emotional tone, choice of images, etc.), while focus groups are more helpful in providing specific reasons why audiences find the content appealing or unappealing.
When the final segmentations have been determined, a sample of each of these populations should be represented in focus groups. Messaging intended to change behaviors should be tested with focus groups and survey samples that represent the populations most likely to commit the behaviors (see *Prioritization Metrics* section*).* Messaging intended to increase general brand awareness should use focus groups and survey samples that segment populations by a variety of factors: lifestyle habits, geographic location, languages spoken, race and ethnicity, age, gender, etc.

- Strategy 10.0: Messaging content should be tested through broad-based surveys and targeted focus groups both before implementation and throughout the campaign.

Social Equity

As mentioned earlier, the Vision Zero education and outreach strategy should take certain considerations into account when communicating with underserved populations and low

income communities. We want to highlight the need for a holistic approach that does not view Vision Zero, mobility, or traffic safety within a vacuum, but rather integrally linked with a host of other issues that impact these same communities.

Issues such as concerns with law enforcement, deteriorating infrastructure, zero-car households, lack of grocery stores, crime, and homelessness all impact why and how people get around and may be more pressing than traffic safety for certain communities. For example, it may be less effective to focus education efforts on the disability community without being able to feasibly ride a wheelchair on the sidewalk. Students walking home from school in an area of high homelessness may need to step into the street to avoid encampments, putting themselves in danger of passing cars.

Messaging should account for communities' different needs and ends when it comes to mobility and traffic safety. For working class communities, safe walking and biking may mean safe access to the places that are of necessity to their daily lives, such as their work, the grocery store, or school. While safe active transportation in a more affluent area may have a more peripheral impact on their daily experience, such as getting more exercise or enjoying nature.

In sum, an education and outreach strategy will be most successful if it acknowledges these considerations *before* messaging and implementing safety programs within various communities. The goal is to meet people where they are in all aspects of traffic safety, and build awareness and behavior change from there.

➽ Strategy 11.0: The education and outreach strategy must consider competing and correlating issues that impact disadvantaged communities.

Community Outreach Strategies

Best Practices for On-the-Ground Public Outreach

Unlike mass media messaging, public outreach refers to in-person Vision Zero education efforts carried out by LADOT or community partners. These outreach efforts will happen in a variety of smaller settings, and will rely heavily on community-based organizations' relationships and expertise around the communities they serve. However, public outreach efforts still need to be able to answer the question, "why should they care?". This question should be answered at individual, family, organization, and community levels. The person or group best able to answer this question will vary depending on the target audience. This section will cover findings and recommendations for on-the-ground outreach for the general public.

Engaging Individuals

Many of our interviewees experienced with on-the-ground outreach discussed effective ways of engaging community members around an issue. The most important factor is making the issue matter at an individual or family level. If the average community member cannot answer the question, "why is this worth taking time out of my day?", the turnout is likely to be low. Sometimes this means taking advantage of local "hot topics" or controversies. For example, a council district office member recounted the most well attended community meeting in recent memory was a meeting with the LAPD after a recent crime spree had hit the neighborhood. Overall, people fundamentally care about safety, their families, and their quality of life, so outreach efforts should draw a strong connection to one or more of these topics.

Incorporating a broader view of the potential benefits and costs of an initiative may also make it easier to align interests with individual community members. For example, more people were supportive of an initiative to turn Oro Street in Woodland Hills into a green street when they learned that it would raise their property values. Taking advantage of certain unintended consequences or related issue areas can be effective in addressing a wider audience.

- Strategy 1.0: On-the-ground outreach should engage individuals by taking advantage of public interest in other local issues and concerns.
- Strategy 1.1: Vision Zero should engage individuals by emphasizing the specific outcomes that align with individuals' or communities' priorities.

Communication

Many interviewees, particularly those with communications expertise, highlighted the importance of using simple, clear, and concise language. Words like "data-driven", "prevalence", and "outcomes," might seem simple enough to those familiar with the terminology, however they are not as accessible to a public audience. Additionally, relying on visuals more heavily than words can be an effective way to transcend language, particularly among non-English speakers.

However, this does not replace the need for community outreach efforts to be in languages that are prevalent in a particular community. In practice, this might look like having a translator in community meetings, having materials printed in 3-4 languages, or having opportunities for public input in non-English languages that can be translated at a later date. It is important to be judicious, intentional, and competent with translation resources. Many nonprofit and city agency representatives recommended using community-based organizations to make sure translations are culturally competent.

Whether the information comes from LADOT directly or from a community partner, it will help community members contribute to the success of a city-driven initiative if they understand the role and limitations of government. Setting clear and realistic expectations around the timeline of infrastructure improvements, for example, might cause less frustration and disappointment in the future. It also helps community members feel like active partners and remain engaged in a process if they receive follow-up communications about the outcomes or next steps following a community meeting.

- Strategy 2.0: Outreach efforts should use simple and culturally competent language.
- Strategy 2.1: When applicable and possible, verbal communication and written materials should be translated by a trusted source into all languages used by the target community.
- Strategy 2.3: Outreach to the community should be framed with clear and realistic expectations, emphasizing the role and limitations of government.

Outreach Methods

Choosing the most effective outreach venue will depend on factors like the community trust in organizations, the nature of the message, and current level of engagement of community members. It will be important for LADOT to remain aware of their "brand" within different communities, and whether or not they are the best organization to spread a message within a particular neighborhood or population. For example, council district office staff representing certain areas of the valley expressed a common "anti-establishment" sentiment in some

constituent groups, where education will be more effective from trusted source (e.g. school, nonprofit, faith-based organization).

Similarly, in communities where few people are engaged in public issues or those that have distrust of government will likely need messaging from trusted CBOs and personal networks. Alternatively, a more actively engaged community with strong participation in neighborhood council meetings might request a Vision Zero presentation from LADOT staff.

Some interviewees shared previous success with outreach by finding "natural pairing opportunities" with existing community events or practices. For example, it would make sense to have community-based advocates spread the message to Southeast Asian cultural groups who tend to walk outside after dinner and talk to neighbors. Generally, pairing with existing community events or practices will garner better audience diversity, as they require less advertising and can target people participating for multiple reasons.

Some groups or people at specific events might have a bias for or against a particular initiative. Interviewees advised not to avoid speaking with groups who have reason to resist the initiative, but approach them with an awareness of how the initiative overlaps with their priorities. Simultaneously, finding groups or events (particularly highly trafficked ones) with compatible interests can be a way to effectively target resources. For instance, the LADOT team working on the "Watch the Road" Campaign partnered with T-Mobile to send active transportation-related messaging to participants of the LA Marathon.

- Strategy 3.0: Vision Zero should leverage community-trusted organizations and leaders to conduct outreach and education.
- Strategy 3.1: Education and outreach efforts should leverage existing events and lifestyle within specific demographics to maximize reach and resources.
- Strategy 3.2: Outreach efforts should recognize varying levels of support for Vision Zero and strive to meet people where they are.

Events and Meetings

Providing incentives, resources, and services are effective ways of attracting people to events. Specifically, providing food, childcare, and varying the times of the events will help bring in those who might not otherwise have the resources to come.

Advertising to a diversity of community partners, leveraging public-private partnerships, and providing interactive activities are methods of widening the reach of events and meetings. Creative working group activities or games can be fun ways to engage and educate at the same time. One city official recalled a four-hour "Iconothon" event that brought together designers, policy experts, and community members to brainstorm visual icons for The Noun Project. She was so engaged she only realized at the end that she was learning about traffic infrastructure throughout the event.

Interactive activities like mapping and explaining why a pedestrian takes a routine route help make people feel like they have an active voice in community improvements, while also providing valuable information to fill in gaps in technical data normally available to city agencies. Leaving participants with a tangible call to action will help them stay engaged in the process and thinking about the issue or initiative.

Events with multiple activities and organizations can be an opportunity to bring people together who normally do not interact. For example, a New York City DOT and Parks and Rec "bike bonanza" event had New York City police officers present to tag children's bicycles in

case of theft. This provided an opportunity for positive reinforcement between children and law enforcement, who might not interact under normal circumstances.

- Strategy 4.0: Education and outreach events should provide physical incentives to garner additional interest.
- Strategy 4.1: Vision Zero should advertise and partner with a diversity of organizations to get increased attendance at education and outreach events.
- Strategy 4.2: Outreach and education events should incorporate interactive activities in order to engage attendees while also acquiring valuable information.
- Strategy 4.3: Vision Zero should use education and outreach events to bring populations together who would not normally interact.

Special Populations

Below are interviewees' specific recommendations and considerations for special populations.

<u>Seniors</u>

- Target senior centers and senior housing
- Humor is more effective than telling seniors what to do; seniors are very sensitive about losing sense of independence related to mobility
- Should provide a variety of print materials---big font size, easy to see and understand, simplistic, be careful with bright colors
- Presentations are best way of reaching seniors, particularly from someone in an authoritative position
- Need to have materials in a variety of languages (Dept. of Aging has translation resources)
- Faith-based organizations are good partners for reaching seniors
- Be aware of multiple senses as they relate to traffic safety (e.g. some electric/hybrid vehicles don't make sounds and particularly important for seniors to be aware of)
- Biggest barriers: language (for non-English speakers) and ability to hear

<u>Children</u>

- Need structure and parental engagement to reach young children ('bike rodeos' are not effective)
- Can sometimes reach parents through their children (e.g. many parents might come to a bike safety class for their child, though they wouldn't for themselves)
- Social media is the most effective medium for young age groups (Instagram and Snapchat are more effective than Facebook for generations younger than Millennials)
- Remember to segment children in smaller age brackets (e.g. middle schoolers and high schoolers are very different)
- Humor is the most effective way to get Youth to share things, particularly on social media /

<u>Disabled</u>

- People with disabilities are often physically less visible in the built environment
- Many disabled people are living on small stipends and may have less access to transport/internet, though internet is still a prominent source of messaging
- It may take more resources for a physically disabled person to get to out of the house and transport themselves to an even than an able-bodied person

- Current mobility focus for disability community is on the physical environment (e.g. lack of proper sidewalk infrastructure means dangerous detours into the street for those in wheelchairs)
- Barrier: many people do not want to identify as disabled (particularly seniors) because of the associated stigma

Non-English speakers

- Culturally named neighborhoods often have multiple prevalent languages (e.g. in Chinatown has prominent Vietnamese and Cambodian populations)
- Visuals are an important tool for communicating to non-English speakers
- Resources for community events: in-person translators, audio set translators, materials printed in multiple languages, input mediums (e.g. big posters) that can be translated later

Typically Unengaged in Public Issues

- Find captive audiences in highly trafficked areas (e.g. gas stations, the DMV)
- Use online surveys and neighborhood blogs
- Urge friends who are more aware of the public sphere to reach out to friends and family who may not be.

➽ Strategy 5.0: Education and outreach efforts should take into account considerations for special populations.

Best Practices for Engaging Community Partners

As the Vision Zero organizer, LADOT should have an idea of the working landscape of the environment proximate to the initiative. Regarding community partners, this means having an awareness of the power dynamics (ability to influence the success of overall initiative or specific project) of partners, their relationships and current priorities. Having this understanding will help LADOT prioritize and utilize outreach resources most effectively. LADOT will need to trust and rely heavily on its community partners for outreach and education, as the implementation of a mission-driven initiative like Vision Zero will vary significantly in different places and communities.

Establishing Partnerships with Community-Based Organizations

A fundamental aspect of successful partnerships between government and community-based organizations is recognizing that both are experts in their own right, with different resources and limitations. With mutual trust and respect, they can more effectively leverage their respective strengths. Developing trusting relationships involves recognition of previous interactions between city agencies or departments and CBOs. Several interviewees representing CBOs expressed a lack of trust for LADOT based on previous experiences. Government transparency and collaboration with CBOs in the decision-making process were emphasized as key ways to strengthen working relationships. Conversely, government representatives expressed the need for CBOs to recognize the limitations of government structure and accept that catering to diverse needs involves sacrifices.

Just as successful campaigns involve making individuals care about the message, LADOT can more successfully engage community partners by establishing a connection between missions, and integrating Vision Zero into CBO's current activities. One way to find organizations with the most alignment and community-specific knowledge would be to send out an RFP to CBOs in each council district or neighborhood designation, with a focus on areas with higher collision prevalence. In this way, LADOT could spread out funding across the city and across organizations. Several interviewees iterated the need for adequate

funding for resource-intensive outreach, and suggested that the funding not be narrowly prescriptive as outreach methods will vary significantly by community.

There may also be opportunities for CBOs to get outside grants from CalTrans or other agencies to help do outreach work on a specific campaign. LADOT's "Watch the Road" campaign was able to broaden its community reach by giving campaign materials to CBOs with outside funding. In addition to physical materials, it would be effective to have workshops to train CBO staff and volunteers on Vision Zero core messaging, materials, and other available resources.

- Strategy 6.0: Successful partnerships between LADOT and CBOs should emphasize transparency, collaborative decision-making, and mutual respect.
- Strategy 6.1: Vision Zero should engage community partners by aligning priorities and existing outreach efforts.
- Strategy 6.2: Where possible, Vision Zero should extend its reach by finding external funding sources to sponsor CBO outreach efforts.

Going Upstream

Effective public outreach campaigns work to simultaneously reach the general public as well as decision-makers and influencers. By going "upstream" in addition to grassroots outreach, a campaign will have the potential to affect policy, legislation, and change wider social norms. One interviewee suggested Vision Zero leaders meet with the five most prominent print media editorial boards in the city to educate them on the purpose and appeal of the campaign. Getting the media on board will help brand the campaign positively as well as put it on the "public agenda."

Approaching elected officials will be another important step in successfully coordinating wider policy change and legislation. One approach is to seek out those elected officials whose priorities already align with Vision Zero, and seek their insight into how it could be successfully framed for their colleagues. At the end of the day it has to be something that they will feel comfortable and championing among their other priorities and to their constituents.

Additionally, educating leaders of other government agencies and departments is an effective way to take advantage of the government network. However, educating their leaders is not enough, as often information does not easily trickle down through an organization. Having compact and attractively packaged resources targeted toward city officials will help the information disseminated through the ranks of these organizations. Have these materials focus on how the campaign is a collaborative effort among departments, always keeping in mind the question, "how can I make it matter to them?".

- Strategy 7.0: Education and outreach efforts should simultaneously target the general public as well as decision-makers and influencers.
- Strategy 7.1: Vision Zero should engage elected officials and decision-makers by aligning it with their existing priorities and values.
- Strategy 7.2: Vision Zero should provide compact, attractive, and tailored resources that can be disseminated throughout city departments.

Other Partnerships

In addition to community-based organizations and formal decision-makers, Vision Zero can expand its reach by leveraging additional partnerships with the private sector, neighborhood councils, alternative media, schools, and/or other cities in the region. It will be the most

resource efficient to find leaders and organizations in other sectors that have aligned priorities with the Vision Zero mission. For example, AAA or car insurance companies might be interested in supporting driver education programs. See Appendix C for more detailed, sector-specific partnership considerations.

- Strategy 8.0: Efforts to leverage partnerships should take into account advantages, considerations, and barriers for specific partners.

Concerns and barriers

The most pervasive barrier to a public outreach campaign in this area is diversity of the Los Angeles population. There is no one common identity or experience as Los Angeles is one of the largest and most diverse cities in the world. Additionally, Vision Zero is city-driven but requires a regional approach in order to target commuters who live outside of the city but often travel within it. It will be impossible to reach all of the necessary audiences through resource-intensive, on-the-ground outreach. Community partners can actively engage in a conversation with city government on how to best and realistically prioritize outreach resources. Mass media purchasing and creating a cohesive, interesting brand will be the best way to reach a broader audience.

Another unique barrier to the Vision Zero campaign is that "traffic deaths" does not automatically register for many people as public problem, or they might only recognize it as a government problem instead of a community problem. While people may think they are tragic, Vision Zero requires a mindset change around traffic deaths being *unacceptable and preventable.* Some interviewees expressed that even if people accept it as a problem, some will think that zero deaths is a naively unrealistic goal, making the campaign seem less credible.

In addition, several interviewees from both government and CBOs expressed a distrust of government and law enforcement in local communities, particularly in low-income communities of color. In places where traffic deaths have been a widespread problem for decades, some will ask, "why does the city care all of the sudden?". This plays into some fears of infrastructure improvements being the first sign of gentrification and displacement, or the idea that these improvements are not for the people who live there. Addressing these concerns will involve open communication around fear over these issues, and expressly mitigating any contributions that infrastructure improvements might have towards displacement.

Fear of "over-enforcement" and distrust of law enforcement in low-income communities of color was also a theme brought up in several interviews. Some interviewees said that the community members they represent would feel less instead of more safe with increased police presence. Some also pointed to aspects of mobility can be criminalized, for example, riding without a helmet or riding on the sidewalks due to lack or resources or infrastructure. This issue could potentially be proactively addressed with collaboration between LAPD and the Vision Zero Alliance and other CBOs involved in the outreach process.

- Strategy 9.0: Education and outreach efforts should expressly and carefully address community-specific concerns around Vision Zero, such as perceived over-enforcement or displacement.

Education Topics

The education component of Vision Zero outreach should be developed and segmented for different target audiences (see Digital Curricula in Appendix B), however should focus on the following topics:

Vision Zero Awareness

The most basic part of any Vision Zero education effort will be to explain the core ideas of the initiative and why they are important. However, unlike many public education efforts, Vision Zero is not merely reminding the audience of something they know--it will involve a paradigm shift for many people around the way they think about traffic safety and education. It will be important for educators knee-deep in Vision Zero to remember that the ideas that "traffic deaths are *unacceptable and preventable*" or that "Vision Zero prioritizes moving *people* safely more than moving *cars,"* will be novel and unpalatable to many community members. Therefore the curriculum should dedicate significant time and energy and a diversity of approaches to addressing this paradigm shift, leaving room for audience discussion to help internalize these ideas.

Make it Personal

Perhaps the most important part of any education and outreach campaign is to make people care by making it relatable to their everyday lives. This portion of the curriculum/presentations should be expressly developed for the particular audience (e.g. school children of different ages, city employees within different departments, neighborhood councils, etc.). At a human level, everyone cares about their families and their quality of life, however people will quickly forget or lose interest in things without a direct call to action for how they can incorporate these ideas into their own lives or work.

Rules of the Road

Lack of public knowledge on proper rules of the road for cyclists, pedestrians, and car drivers, was emphasized by several interviewees as a major factor contributing to dangerous behaviors. There are many "rules of the road" curricula that could be easily adapted for use with Vision Zero, however they should be honed in on knowledge areas directly affecting dangerous behaviors, for example:

- Right of way between different modes
- When and where pedestrians are allowed to cross the street legally
- When and where cyclists can ride most safely and legally
- Car speed limits

This curriculum should be tailored for different age groups and languages, but can remain consistent in content. A creative video or interactive presentation (e.g. a quiz to see how many things people get right or funny animated video) will garner more attention, particularly on social media, than simple instructional language. It may sometimes be helpful to coordinate in-person education efforts with law enforcement as part of larger Vision Zero outreach events.

Mode-specific education

While we encountered multiple interviewees representing organizations with ongoing cyclist safety trainings, there is less focus on education efforts targeted toward pedestrians and drivers. While safety trainings might be more coveted by cyclists because of the lack of

cycling infrastructure, one interviewee also expressed that most people do not hold a strong identity as a "pedestrian." A coordinated curriculum that addressed both pedestrians and drivers would target a large segment of the population that both drives and walks on a regular basis.

In addition to an adopted written curriculum for in-person education efforts, current cyclist trainings should be financially supported so they can expand their capacity and marketing reach. Short-video modules addressing all modes (many are already developed for free/purchase) should be available on the Vision Zero website for community partners to use. A short, engaging video easily shareable on social media would help target audiences who will never take the time to do or be otherwise exposed to in-person trainings.

It may be valuable to discuss a possible partnership with car insurance companies to develop and promote a driver's safety class (online or in-person) in order to reduce premium costs or receive some other benefit. These could be targeted toward drivers with history of accidents or tickets.

Lastly, more formal and digital education approaches can be complemented with creative on-the-ground education. For example, one Vision Zero focus city gave out fake tickets to pedestrians and cyclists at particularly dangerous intersections that contained funny and educational messages about traffic rules.

Integration with Engineering and Enforcement

Infrastructure improvements and increased enforcement efforts will both necessitate and offer opportunities for additional education. Both are highly visible and sometimes controversial, which can result in a more engaged public audience. However, education efforts will also need to be proactive around both of these areas, so community members understand how to use infrastructure, and the purpose of engineering and enforcement within the overall mission of Vision Zero. Controversial topics may be a gateway to educate neighborhood members who might not otherwise be interested in Vision Zero. Special attention should be given to low-income communities of color who may have distrust of law enforcement or perceive new infrastructure as a sign of rising rents and displacement.

Input Mediums

All education efforts should include opportunities for input. Not only does giving community members a voice make them more likely to feel engaged, open conversation will help internalize the lessons and draw connections to their own lives. Lastly, gauging the concerns or confusion of the public will help make future education materials and presentations more effective by addressing them proactively.

SECTION 5: MESSAGING CONTENT AND BRANDING RECOMMENDATIONS

Prioritization Metrics

Community Voted Priorities

LADOT has created a safety prioritization system in order to strategically allocate Vision Zero resources for engineering, enforcement, and education. These priorities will inform where to execute engineering countermeasures as well as how to effectively enforce traffic laws. For education, the priorities will help to identify the audiences and develop messaging content. Through community surveys and public input, LADOT determined that **1) Severity 2) Prevalence and 3) Social Equity** are their top three priorities. Given these priorities, LADOT has decided to focus their efforts as follows:

Safety Priority	Reason
Pedestrians and bicyclists	They are greatly overrepresented in KSI collisions relative to both their mode share percentage and percentage of total collisions
Children and seniors	They have a higher share of pedestrian and bicyclist (aged 11-17) victims than any other age category and are overrepresented in KSIs compared to total collisions (10% and 4% respectively)
Low income communities	They are geographically overrepresented in KSI collisions

Technical Collision Analysis (2003-2013)

While the top three priorities indicate the populations who are most impacted by dangerous traffic behavior, they do not include the specific behaviors or those most likely responsible for KSI collisions (for whom the behavior change messaging should be tailored). Since the goal of the Vision Zero education and outreach strategy is to both raise awareness and change behavior, a messaging campaign must center around the populations and behaviors that pose the most danger to others on the road. Using the technical collision analysis from Fehr and Peers as well as the raw collision data from police reports, we identify the following demographic, behavioral, and geographic priorities to focus on when developing the education and outreach strategy.

<u>Demographics</u>

Drivers

The data show that vehicles and thus drivers pose a disproportionate danger relative to other modes of transportation. The top two highest percentages of KSI collision types involve vehicles with vehicle/pedestrian collisions at 31% and broadside collisions at 30% of the total KSIs. Although these numbers do not indicate the at-fault party, it does demonstrate that a vehicle-involved (and thus a driver) collision significantly increases the risk of a KSI collision.

Another data point revealing the disproportionate danger posed by vehicles is the overrepresentation of both pedestrians and cyclists as KSI victims and the two leading

KSI collision types for these groups. Pedestrians and bicyclists were a small percentage of all victims (11%), yet they made up 44% of KSI victims. The two most prevalent types of KSI collisions involving a pedestrian or bicyclist are "vehicle/pedestrian" and "broadside," indicating that both of the leading KSI collisions for walkers and bicyclists involved vehicles.

Finally, pedestrians and bicyclists are also overrepresented in KSI collisions relative to the percentage of those who walk or bike to work while drivers are significantly underrepresented relative to their commuter mode share. While only 17.6% and 1.4% (19% total) of commuters walk or bike to work, 44% of KSI victims were pedestrians or cyclists and 47% of fatal collisions between 2007-2009 involved a pedestrian. Conversely, 74.8% of commuters drive to work yet drivers make up only 42% of KSI victims.[5] When you include passenger KSI victims within this count, those within vehicles still only make up 56% of KSI victims. These statistics demonstrate the need for Vision Zero messaging to target drivers since they pose a significantly higher threat to others on the road.

Males (Aged 18-54)

The second high-risk population to target when developing messaging content aimed at decreasing traffic fatalities is males and more specifically, males aged 18-54, because they are disproportionately involved in KSI collisions. Males aged 18-54 nearly double females in the number of at-fault parties in all collisions and they are over five times more likely than females to be the at-fault party in KSI collisions, with 240 at-fault male parties and 52 at-fault female parties.
Males of all ages are also overrepresented within the victim count for KSIs. While they make up a slightly higher raw number of total victims within all types of collisions, they are more than twice as likely as females to be a victim within in a KSI collision (68% versus 30%). More specifically, male drivers aged 18-54 are almost four times as likely as female drivers of the same age to be killed or severely injured in a collision.

Finally, males make up the majority of collision parties under the influence of alcohol and drugs. Males made up 86% of the parties under the influence of alcohol while females made up 14%. A similar trend exists for drug-use, where males account for 83% of parties under the influence of drugs versus 17% for female parties. Thus, while drivers impose a higher risk on others while on the road, if Vision Zero wants to target their audience further, the messaging content should also focus specifically on male drivers aged 18-54 since they are disproportionately involved and found to be at-fault within KSI collisions.

Behaviors Preceding Collision

In order to have the greatest impact, the Vision Zero messaging should target not only high risk populations, but also those behaviors, which are found to be the leading causes of KSI collisions. The high-risk behaviors that Vision Zero should consider when developing the messaging strategy are outlined below.

Speed

[5] Journey to Work (2013).

Unsafe speed was cited by the data, other research, and interviewees as one of the lead contributors to all collisions in general as well as collisions which resulted in a KSI. This is demonstrated in the data as unsafe speed was found to be a preceding behavior in 26% of all collisions. Within KSI collisions specifically, 25.3% of the collisions have the primary collision factor or other associated collision factor listed as "unsafe speed" or "following too closely."[6] Additionally, 12.8% of pedestrian or bicyclist-involved KSI collisions have the primary collision factor listed as "unsafe speed" or "following too closely". As a point of comparison, these factors account for 7.4% of non-KSI collisions involving pedestrians and bicyclists.[7]

While the data show that automobile right-of-way topped unsafe speed, there is most likely an underreporting of speed as a contributing factor due to the way in which law enforcement officers are instructed to fill out the reporting forms. For example, one major reason why the percent of speed-related collisions is so much lower when you filter for "ped/bike only" is because most pedestrian-involved collisions are marked as "pedestrian right of way" or "pedestrian violation," as instructed in the California Highway Patrol manual, even if they also involve a speeding vehicle.[8]

Unsafe speeding is becoming more and more difficult to enforce since speed limits across the city of LA have expired and need to be updated in order for LAPD's citations to hold up in the court of law. Officers from within LAPD cite that they have lost the ability to enforce approximately 75% of the streets that they used to be able to due to expired speed limits. Updating the speed limit is very difficult politically because the process often leads to a 5-10 mph increase of the stated speed limit, however the increase in necessary for law enforcement to be able to enforce speeding at all. While elected officials are currently discussing the regulations around speed surveys, messaging addressing speeding is vitally important for changing behavior in the immediate future.

Inattention

A similar pattern exists for inattention as a primary collision factor. Inattention was not cited as a contributing factor for any fatal collisions, yet national data and an overwhelming majority of the interviewees we spoke with indicated otherwise. In our interviews with 46 stakeholders, a vast majority cited "distraction" as the most prevalent cause of dangerous driving behavior among themselves and those that they know. This is backed by national data which states that 3,179 were killed in motor vehicle crashes involving distracted drivers in 2014 (USDOT), and an EERIE insurance study which found that one-third of respondents admitted to texting behind the wheel while 75% say they've seen someone else do it.

Similar to speed, inattention is likely to also be underreported as a contributing factor since law enforcement officers arrive to the scene after the collision has already taken place; thus any evidence of inattention is easily no longer apparent (cell phones are put away, etc.) However, the dangers of distracted driving are evident to traffic officers who will often pull someone over for texting and driving using the same criteria that they look for in driving under the influence.

[6] LAPD has said that "following too closely" can be interpreted as traveling to fast for conditions.
[7] Chelsea Richer, Transportation Analyst at Fehr and Peers, provided us with this analysis on quote "unsafe speeding".
[8] Ibid.

For the non-KSI reports which *do* cite inattention as a contributing factor to the collision, cell phones were the most common reason for collision due to inattention for both male and females. Twenty-six percent of female parties cited inattention due to children or pets whereas only nine percent of males cited children or pets as a reason for the collision. Taking into account, messaging should consider content specifically around distraction from cell phones, children, and pets when addressing inattentive behavior.

While our interview data is not a representative sample and the national data could differ from Los Angeles-specific incidents, the overwhelming consistency in responses around inattention/distraction indicates that this behavior plays a significant role in collisions and should be prioritized when developing an education strategy. Furthermore, it is important to consider the discrepancies which may arise from the system of reporting. For these reasons, Vision Zero messaging aimed at behavior change should target underlying factors and provide safer alternatives to speeding and inattention.

Other Considerations

Bikes: Entering into traffic/merging and wrong way travelling

The next set of target behaviors and audiences are dangerous pedestrian and cyclist behaviors. While pedestrians and cyclists pose little threat to others, addressing these behaviors can help ensure their own safety.

Aside from proceeding straight, the two most prevalent bike party behaviors preceding collisions are "entering in traffic; merging" (677 collisions) and "crossing into opposing traffic; travelling wrong way" (538 collisions). These two behaviors were also the top reasons for fatal collisions involving cyclists with 19% of fatal collisions occurring from "entering in traffic; merging" and six percent from "crossing into opposing lane; travelling the wrong way."

"Crossing into opposing lane; travelling the wrong way" is particularly significant for cyclists as it was cited as the second lowest cause for an accident in all collisions, but is cited as the third most common reason for fatal bicycle collisions.

This is further exhibited within the collision profile data where "wrong side of road" violations involving cyclists account for 121 or 44% of the total number of KSI collisions resulting from wrong way violations (of any mode), and 19% of the total number of KSI collisions involving bicyclists (of any violation category).

Although this data does not explicitly state that it was the bicyclist who was killed or severely injured or the one travelling the wrong way, "it is likely that for most of these collisions that is the case, thus indicating that the bicyclist in the bicycle KSI collisions is found to be at-fault."[9]

Pedestrian Insobriety

Similar to wrong way riding, a behavior found to be a disproportionate contributor to pedestrian fatal collisions is pedestrian insobriety. While pedestrians made up 3% of all

[9] Fehr and Peers Technical Collision Analysis (2016).

parties under the influence of alcohol in all collisions, they made up 42% of all parties under the influence involved in fatal collisions.

The majority of KSI pedestrian and bicyclist collisions were categorized as the fault of the person walking or biking. However, many of our interviewees also expressed that many drivers do not know it is in fact legal to cross anywhere there is an intersection regardless of having a painted crosswalk, and therefore are not scanning for pedestrians or cyclists.

Furthermore, pedestrians that do cross mid-block (as opposed to an intersection) were likely exhibiting rational behavior, which did not align with the existing infrastructure. For example, in some parts of the valley, crosswalks can be a quarter to a half mile apart, which means the pedestrian must walk an additional half mile in each direction if their destination is on the other side of street. The same holds true for cyclists travelling the opposite direction on one way streets because of the convenience factor, or who do it because they are fearful of turning their backs to drivers.

When designing a behavior change campaign, then, it is important to understand the difference between reckless pedestrian or cyclist behavior and behavior that makes the most rational sense given the available options. Therefore, although pedestrians and cyclists are the parties exhibiting high-risk behaviors, a successful messaging campaign must target both them and drivers; raising awareness about these occurrences while also elevating the driver's responsibility in looking out for people on the road.

Geography

The final factor to take into account when developing the messaging content of the Vision Zero campaign is the geographic location of the collisions, and how that will help further segment the population within specific neighborhoods. In terms of geography, KSI collisions involving vehicles, pedestrians, and bicyclists are dispersed widely throughout the entire city of Los Angeles. However, there is a heavier concentration of KSI collisions in the central area of the city, as Downtown LA, South LA, Westlake, Pico Union, Koreatown, East Hollywood, and Hollywood all have high concentrations of KSI collisions. Notably, these are the same areas that score high on the Community Health and Equity Index, meaning these are the same communities with the poorest health outcomes.

At the experiential level, many of the interviewees who represented various low-income communities cited high density populations and vehicle-centric infrastructure, such as wide streets, freeways and fast moving pass-through traffic as contributing factors to the higher KSI collision rates within their communities.

The higher KSI rate in certain areas is compounded further by the higher rates of walking/biking/public transit use within the same areas as shown by the Journey to Work data (2013). The populations within these communities are more likely to be transit-dependent (i.e. do not own a car) and therefore more likely to be using active modes of transportation to get to and from the transit station. A study by Metro shows that 75% of Metro riders make less than $25,000 annually and 50% of Metro riders are transit dependent.[10] Moreover, biking/walking/rolling makes up 85% of access trips to bus rapid

[10] 75% and 45% of its bus riders and train riders respectively were transit-dependent (i.e. did not own a car). Bus riders had an average annual income of $14,423 while train riders had an average annual income of $26,250, which is 26% and 47% of the county average ($55,476) respectively (Metro First Last Strategic Plan, 2014).

transit and rail stations and over 95% of total system access.[11] The higher prevalence of active transportation within low-income communities as a means to access work and economic centers, paired with the overrepresentation of pedestrians and bicyclists in KSI collisions, sheds light on the need to prioritize these communities for Vision Zero education and outreach efforts.

Further, although KSI collisions are occurring all over the city, collisions may be underreported within these communities as it has been found that low-income and undocumented individuals are less likely to report a collision due to government distrust and/or a sensitive citizenship status. Therefore it is likely that the actual number of KSI collisions in these low-income communities is much higher.[12]

Factors Driving Dangerous Behaviors on the Road

In addition to looking at the technical collision data, we also used qualitative interview data to help explain what is contributing to KSI collisions. Throughout our interviews we often came back to the question, "what's driving the dangerous behavior?". Thinking about the underlying factors contributing to dangerous behaviors allows messaging to be targeted to the root cause rather than the symptoms. Below is a list what we believe to be the major factors driving dangerous behaviors on the road. These factors, along with their positive alternatives, should be at the heart of messaging content aiming to change dangerous behavior.

Underlying factor driving dangerous behavior	Explanation and specific examples
Lack of empathy	This factor manifests itself in various ways, and probably most broadly in a "dehumanization" of others on the road. Lack of empathy for those traveling around you may lead one to see others as obstacles in their path, or to see your own travel needs as paramount to all else. This is particularly evident between people in different modes of travel, for example, a driver not giving a cyclist enough space, or pedestrians and drivers forgetting what it's like to be in the others' shoes.
Rushing	Rushing, most likely due to time pressure, leads to speeding and reckless driving (e.g. not looking carefully for pedestrians and cyclists). These behaviors have become more prominent on residential streets as people cut through them at the suggestion of mapping applications.
Recklessness	Recklessness is broader than rushing as a primary cause of dangerous behaviors. It can stem from people acting in ways they know to be dangerous and are no more convenient for their end purposes. For example, drinking and driving when one could easily ride with a designated driver, or speeding for fun or to show off.
Lack of knowledge	This is one of the most important areas to address in the educational components of Vision Zero. For instance, common misconceptions that may lead to dangerous behaviors are that it's always illegal for a

[11] First Last Mile Strategic Plan, 2014. Metro.
[12] Cottrill and Thakuriah (2010).

	pedestrian to cross an arterial without a painted crosswalk or that it's safer for a cyclist to ride against traffic.
Lack of skill	Lack of skill operating a car, motorcycle, truck, or bicycle on the road will be difficult to address without direct, in-person training. This highlights the importance of existing training programs and the need for the average car driver to be able to hone their skills. Car insurance companies may have aligned interests and could provide incentives for people with poor driving records to take classes.
Impatience	Impatience can lead to speeding, as well as distraction/inattention--probably one of the most commonly underreported causes of dangerous behavior on the road. Distraction/inattention has become significantly more prominent with the use of hand-held technology. Texting and driving is the behavior that commonly comes to mind, however talking to other passengers, thinking about things other than driving, dealing with children and pets, putting on makeup, eating, or looking at a crash scene are other examples of distraction.
Convenience	People will most often act "rationally", meaning they will take the shortest route to get to their destination. For pedestrians, that might mean a midblock crossing where there is lack of crossing infrastructure. For delivery workers in Downtown LA, that may mean bicycling the wrong way down a one way street in order to make deliveries as fast as possible.
Inadequate infrastructure	Inadequate infrastructure is one of the key factors being addressed in the Vision Zero strategy, and the one of the only factors that does not mostly rely on human behavior. Many people may recognize the need for more obvious infrastructure improvements such as new bike lanes, crosswalks, stop signs, etc. It is also important to remember the way different populations interact with infrastructure. For example, how less able-bodied people may have to go into the street because of inadequate sidewalks, or seniors may need more time to cross the street.

Prioritization Considerations

Given the collision data, relevant literature, and findings from the interviews that illuminate the underlying factors behind dangerous traffic behavior, we have determined a messaging prioritization strategy that will inform the phased-in approach of purchased media. In developing these priorities, it is important to take into account current brand perceptions and barriers, as well as the size of a targeted population relative to available resources and the investment it would take to reach them.

Current Perceptions and Challenges to Vision Zero Brand

As is the case at the start of many public health campaigns, Vision Zero currently has little brand recognition in Los Angeles. Many of the people we spoke to remarked that most people they know outside of city government or transportation advocacy circles have never heard of Vision Zero. It is also not immediately obvious that the name "Vision Zero" is referring to traffic safety. People may have existing associations with the term, such as environmental causes to lower emissions or reducing homelessness. Additionally, if members of the public learn what Vision Zero is at it's most basic level--end traffic fatalities--without

having any further background, they might see the brand as representing a campaign that is unrealistic and therefore uncredible. An effective branding campaign that utilizes mass media advertising can overcome these barriers, however the campaign must target people at their starting point, who have zero current knowledge of the brand or purpose of Vision Zero.

Consider the Size of the Pie

The share of a target segment within the overall population is an important factor to consider when prioritizing messaging resources. For example, if we are targeting bicyclists who ride on the wrong side of the road, we may wish to implement proper riding curriculum within workshops rather than create a series of TV advertisements given the relatively small number of Angelenos impacted by this type of behavior.

That being said, we recommend the messaging campaign be divided into three phases, which can happen separately or overlap. Together these phases should last 1-3 years.

Phase 1: Brand Awareness	Purpose	To increase general awareness of the Vision Zero campaign, strategies, and outcomes within Los Angeles
	Audience	General Public
	Behaviors	All
	Outcomes	1. The average person who has no connection to Vision Zero will recognize the name and be able to understand the purpose of the campaign 2. There will be an initial attitude shift around traffic fatalities in that they are 1) preventable and 2) unacceptable
Phase 2: Attitudes and Behaviors (Preliminary)	Purpose	To change dangerous driving behaviors related to speeding and distraction among male drivers
	Audience	Male Drivers (Aged 18-54) • This group will be segmented further based off of lifestyle and more specific demographics such as race and country of origin (more research will need to be done to determine these groups)
	Behaviors	Speeding and distracted driving
	Outcomes	1. Reduce instances of speeding violations and distracted driving among males (distraction will be harder to measure, but focus groups and post-surveys may help evaluate)
Phase 3: Attitudes and Behaviors (Secondary)	Purpose	To shift dangerous traffic behavior within targeted groups of pedestrians and cyclists and to create a deeper attitude shift among drivers which elevates their accountability in pedestrian and bicyclist-involved traffic collisions
	Audience	Pedestrians, Bicyclists, Drivers
	Behaviors	Pedestrian insobriety, bicyclist wrong way riding, driving in general

	Outcomes	1. Decreased pedestrian fatalities due to pedestrian insobriety, higher instances of pedestrians using taxi, friends, or rideshare services to get home from bars 2. Decreased bicyclist fatalities due to wrong way riding, decreased prevalence of wrong way riding, increased awareness of bicycle riding rules 3. Increased driver's awareness of pedestrian and bicyclist right-of-way laws 4. Shift driver's attitudes around their own accountability in saving lives regardless of whether their right-of-way is violated

Messaging Content Recommendations

The prioritization of messaging and phases must be established in coordination with the actual content of the messages. Content recommendations including Vision Zero core messages, case study advertisements, and example sketches are outlined below.

Core Messages

As discussed in the section on "Messaging Strategies," mass-marketing content will be most effective if these efforts are grounded in universal core messages. While they can be tailored to different communities and demographics, the core messages should remain consistent to become *Vision Zero Los Angeles brand*. For example, in a U.S. census marketing campaign, the three core messages were:

1. Participating in the census helps communities
2. Participating in the census is safe
3. Participating in the census is fast and easy

The first message gave a relatable, personal reason for why people would want to help the effort, or why they should care. The second two messages addressed barriers to participation that were grounded in fears that the census might not be safe for them (for example, because of their immigration status) or that it will be inconvenient. Each of these core messages was then substantiated depending on the audience with specific examples, different taglines, images, and stories.

The sections below outline three core messages for Vision Zero generally, and three core messages for Vision Zero Los Angeles. All messaging content should address at least some parts of both the general Vision Zero and Los Angeles-specific core messages. Core messages are simple and can be developed in a myriad of different ways for public consumption. The core messages both promote desired attitudes and address fundamental concerns or perceptions that might prevent people from understanding and/or adopting Vision Zero. These core messages are integrated into the messaging phases described above.

Vision Zero National Core Messages

Vision Zero represents a paradigm shift in the way the public understands traffic related fatalities. Rather than accepting traffic deaths as an unavoidable side effect of human operated vehicles, Vision Zero places the onus on city governments to slow down traffic through infrastructure adjustments, while also placing an increased responsibility on every person behind the wheel. The three core messages of Vision Zero nationally are as follows:

1. Vision Zero saves lives
2. Traffic deaths are unacceptable
3. Traffic deaths are preventable

The power of these three core messages lies not only in the paradigm shift, but in the shared responsibility that the messages invoke as well. “Traffic deaths are unacceptable” implies a collective understanding that “traffic deaths do not happen here,” thus inciting a norm change of what is expected or acceptable within our streets. In turn, this creates a culture where people slow down and are alert while driving.

As with any core message, these three messages will be tailored to specific communities, as well as to targeted audiences and behaviors. For example, a daily driver who has no desire to bike, but wants his family to be safe may respond better to “Vision Zero saves your children’s lives” or “driving slower around schools saves lives.” The same follows for people who walk and drive frequently who may respond well to “your choices matter,” while someone who only drives may resonate more with “you have the power to save a life.”

Los Angeles-Specific Core Messages

These core messages were developed considering prevalent themes from interviews with stakeholders representing diverse populations throughout Los Angeles, and relating them to the factors driving dangerous behaviors (see above section). The three core messages specific to Vision Zero Los Angeles are as follows:

1. Public streets are community space
2. You are responsible for others’ safety
3. Transportation is about moving *people*

These messages build off of the general Vision Zero core messages and go a step further to address Los Angeles-specific perceptions and attitudes that might prevent successful adoption of the Vision Zero mission. The first two messages address themes of individualism, lack of respect for public space, and sense of entitlement on the road. The last core message addresses the car-centric mentality prevalent in Los Angeles. It shifts the paradigm around the idea of a successful transportation system--from one that moves cars most efficiently to instead one that moves people most efficiently and safely.

When comparing Los Angeles to New York City, for example, where there is a scarcity of public space and so many pedestrians, cyclists, and cars, there is more necessity for the recognition of one’s presence in a communal public space. By sheer force of number and the slowness of car traffic, there is a stronger “pedestrian” identity. The recognition of an “ecosystem” of different modes of travel is also prevalent in other geographically condensed areas, like San Francisco, where less people have cars and more people are likely to use public transit or active transportation.

The messages will need to be tailored to different geographic areas, cultural groups, and behaviors. For example, in suburban areas in the valley, where there is less access and interest in public and active transit, the message “Transportation is about moving people”, will have to be careful to avoid shaming people for using their cars. Geographic areas with more cyclists could use the first two messages to target the tension between car drivers and cyclists. All messaging should use the languages most appropriate for the audience, accurately reflect the diversity of the various neighborhoods with their models, and be culturally appropriate for their target audiences.

We believe these core messages can help make Los Angeles transportation culture into one of greater accountability, community-mindedness, and a move away from cars at the top of the transportation hierarchy. These are the types of changes in attitude and perceptions

specific to Los Angeles that will help the broader culture shift necessary for a successful Vision Zero program.

Case Study Ads

"NZ Anti-Drink Driving Commercial - Legend":
https://www.youtube.com/watch?v=CtWirGxV7Q8

In this one-minute commercial spot, a young Maori man stops his friend from driving home drunk from a party. He first recognizes the situation, has an internal dialogue and a few imaginary scenarios about the potential barriers to action (a girl will think he's dumb), and consequences to inaction (his friend's ghost following him around), and then publically convinces his friend to sleep at the house.

The genius of this ad is multifaceted. Firstly, the ad focuses on one clear message (don't let friends drive drunk) and targets a specific population (young Maori men), who are vastly overrepresented in DUI collisions. The internal dialogue lets the audience into the character's mind as he considers the barriers and consequences of potential actions. The commercial then highlights the "moment of confrontation" as a brave action. The main character is put on the spot in the confrontation, but is ultimately rewarded with a positive outcome and is branded as a "legend" by the tagline. The theme of death and tragedy is approached skillfully by making it both funny and approachable, but also very personal (i.e. it's clear the character knows his friend's family).

This commercial touches on all three aspects affecting behavioral intention according to the Theory of Planned Behavior. The ad shows the main character's attitude (I shouldn't let my friend drive home drunk), addresses the beliefs about whether the important people in his life will approve or disapprove of the behavior (the girl he likes, his drunk friend, his drunk friend's family), and ultimately shows that the character is capable of carrying out the behavior (successfully confronting his friend).

"NZ Anti-texting and Driving Commercial - Hello":
https://www.youtube.com/watch?v=wM75ulDRkhI

This viral 45 second commercial depicts several shots of different passengers preventing their drivers from answering a text by instead holding the driver's hand as they reach for their phones.

The ad is relatable as it shows a common situation--two people driving in the car together, and also depicts gender and racial diversity in the actors. It takes a creative and non-patronizing approach in comparison to traditional anti-texting messaging, adding a surprise factor with the unexpected and funny action of handholding between people in a non-romantic relationship. The ad also addresses the exact moment of decision for a driver, when their phone alerts them to a text message while they are driving, and provides an unrealistic but positive alternative. It takes a new twist on the effective appeal of "put others first".

True to ecological models of behavior change theory, the ad emphasizes the relationship between the individual and their environment (in this case, the other people in the car) and their ability to impact each other. Here, the passenger asserts their own agency by preventing the driver from texting, and elicits a memorable response from the driver to in turn potentially change their attitude toward the behavior.

"NZ Speed ad- Mistakes"

In this one minute viral commercial, two male drivers stop and have a conversation in the moment before the one man who is speeding is about to hit the other driver who is pulling in front of him.

The ad targets a key speeding demographic--young to middle-aged men--and incorporates the all-important theme of family and children (one man pleads to the other that his child is in the backseat). While addressing a specific behavior of speeding, the ad takes an unconventional approach by appealing to human fallibility, with the tagline "other people make mistakes, slow down". In this case, the person who is not speeding is the person who made the more obvious mistake, but the person speeding could have prevented the collision by driving slower.

While addressing almost all of the components of the Health Belief Model of behavior change, it notably hits on the following three:

- Believe they are susceptible to the condition (perceived susceptibility)
- Believe the condition has serious consequences (perceived severity)
- Believe taking action would reduce their susceptibility to the condition or its severity (perceived benefits)

The man speeding in the ad understands that he is susceptible to other drivers' poor decisions, that speeding can have serious consequences, and that slowing down can prevent the susceptibility of those serious consequences.

"City of West Hollywood Crosswalk *Wink then Walk* Ad Series":
http://www.weho.org/services/public-safety/crime-and-safety-tips/pedestrian-safety

As part of their crosswalk safety campaign, the city of West Hollywood developed three ads to target cyclists, pedestrians, and drivers. The foundational ad, *Wink then Walk,* depicts a shirtless man in theme with the sexualized branding of other traffic safety efforts in West Hollywood (Alice in WeHoland, The Pickup trolley). The brand in itself is surprising and attention-grabbing because traffic safety is not normally associated with sexual themes.

SECTION 6: NEXT STEPS

LADOT, the Vision Zero Education Subcommittee, Vision Zero Alliance, professional consultants, and other community partners will be responsible for the coordinated development and implementation of this strategy. Below are some of the immediate next steps for both mass-media messaging and education and outreach efforts.

Messaging

The consultant will need to do further market research, either through surveys and focus groups, or other marketing firms' data, in order to further segment target audiences based off of lifestyle, race and ethnicity, behaviors, and values. Once these segments are established, the consultant, with guidance from the education subcommittee and LADOT, will develop the messaging content to be tested by the public through surveys and focus groups.

This team will also need to develop the non-traditional campaigns such as staged events or public art installations. Specific strategies for earned media should be conceived in conjunction with non-traditional campaigns. Finally, the consultant will need to develop a media schedule outlining when to purchase and launch advertisements as well as roll out the non-traditional campaigns.

Education and Outreach

LADOT and the Education Subcommittee will need to secure, prioritize, and allocate funding for organizations responsible for on-the-ground outreach efforts. Funding and other limited resources should be prioritized by mapping the landscape of those who have influence and/or interest in the overall success of Vision Zero. Those actively involved in Vision Zero should continue to leverage both internal (i.e. other city departments and agencies) and external (private sector, media, council districts, CBOs, etc.) partnerships. Vision Zero can extend its reach through these networks by compiling and developing transferable educational curricula and other materials (physical incentives and digital resources), which can be further tailored for specific use by these community partners.

SECTION 7: REFERENCES

1. Argan, P.F., Castillo D.N., Winn D.G., (1990). Limitations of data compiled from police reports on pediatric pedestrian and bicycle motor vehicle events. http://www.ncbi.nlm.nih.gov/pubmed/2222701

2. Bernhardt JM. Communication at the Core of Public Health. American Journal of Public Health 94(12): 2051–2052, December 2004.

3. Cottrill, C. & Thakuriah, P. Evaluating pedestrian crashes in areas with high low-income or minority populations. Accident; analysis and prevention 42(6):1718-28 (2010).

4. Delaney, A., Lough, B., Whelan., M, & Cameron, M. (2004). A review of mass media campaigns in road safety. *Monash University Accident Research Centre Reports,* (220).

5. Distraction.gov, U.S. Department of Transportation. http://www.distraction.gov/stats-research-laws/facts-and-statistics.html

6. Donovan, R. J., Jalleh, G., & Henley, N. (1999). Executing effective road safety advertising: Are big production budgets necessary? *Accident Analysis and Prevention, 31*(3), 243.

7. Erie Insurance Company. Distracted Driving Survey, 2015. https://www.erieinsurance.com/about-us/newsroom/press-releases/2015/distracted-driving

8. Fishbein M, Triandis HC, Kanfer FH, et al. Factors influencing behavior and behavior change. In: Baum A, Tevenson TA, Singer JE, eds. Handbook of health psychology. Mahwah, NJ: Lawrence Erlbaum Associates, 2001.

9. First Last Mile Strategic Plan (2014). Los Angeles County Metropolitan Transit Authority.

10. Gielen, A. C. & Sleet, D (2003). Application of Behavior-Change Theories and Methods to Injury Prevention. http://epirev.oxfordjournals.org/content/25/1/65.full.

11. Gielen A.C., Collins B. Community-based interventions for injury prevention.Fam Community Health 1993;15:1–11.

12. Green L.W., Kreuter M. Health promotion planning: an educational and environmental approach. 3rd ed. Mountain View, CA: Mayfield Press, 1999.

13. Haworth, N. (2005). Maximizing the impact of road safety advertising. *Road & Transport Research Journal, 14*(4), 3.

14. Hoekstra, T., & Wegman, F. (2011). Improving the effectiveness of road safety campaigns: Current and new practices. *IATSS Research, 34*(2), 80.

15. Lonero LP, Clinton KM, Wilde GJ, et al. The roles of legislation, education and reinforcement in changing road user behaviour. Toronto, Ontario, Canada: Safety Research Office, Safety Policy Branch, Ministry of Transportation, 1994. (Publication no. SRO-94-102).

16. McGinnis, J.M., Williams-Russo P., Knickman J.R. The case for more active policy attention to health promotion. Health Affairs 2002;21:78–93.

17. McLeroy K.R., Bibeau D., Steckler A., et al. An ecological perspective on health promotion programs. Health Educ Q 1988;15:351–77.

18. McLoughlin E., Vince C., Lee A., et al. Project Burn Prevention: outcome and implications. Am J Public Health 1982;72:241–7.

19. New York City Vision Zero Marketing and Outreach Plan. New York City Department of Transportation.

20. Noar, S. (2006). A 10-year retrospective of research in health mass media campaigns: Where do we go from here? *Journal of Health Communication, 11*(1), 21.

21. Rimer, B. K., & Glanz, K. Theory at a Glance: A Guide for Health Promotion Practice. 2nd ed. National Institute of Health, 2005. http://www.sneb.org/2014/Theory%20at%20a%20Glance.pdf.

22. Rodriguez, L., & Anderson-Wilk, M. (2002). *Communicating highway safety: What works.*

23. San Francisco Citywide Strategy for Education and Outreach. Vision Zero Education Subcommittee.

24. Sciortino, S., Vassar, M., Radetsky M., and Knudson, M. San Francisco pedestrian injury surveillance: Mapping, under-reporting, and injury severity in police and hospital records. Accident Analysis & Prevention, Volume 37, Issue 6, November 2005, Pages 1102–1113.

25. Smedley, B. D., & Syme S. L., editors, (2000). Promoting Health: Intervention Strategies from Social and Behavioral Research. Committee on Capitalizing on Social Science and Behavioral Research to Improve the Public's Health, Division of Health Promotion and Disease Prevention. http://www.nap.edu/read/9939/chapter/1

26. SWOV Institute for Road Safety. (2013). Mass-media information campaigns about road safety. Retrieved January 2015 from http://www.swov.nl/rapport/Factsheets/UK/FS_Public_information.pdf

27. Treno A.J., Holder H.D. Community mobilization: evaluation of an environmental approach to local action. Addiction 1997;92(suppl 2):173–87.

28. U.S. Census Bureau. (2013). Journey to Work. *American Community Survey.*

29. Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *The Lancet, 376*(9748), 1261.

SECTION 8: APPENDICES

Appendix A. Behavior Change Theories

Below is an overview of behavior change theories and concepts specific to injury prevention.

Passive Versus Active

Passive behavior change theories (BCTs) involve changing a product or the environment of the target population (e.g. water fluoridation) to achieve positive outcomes regardless of the individual's behavior. A*ctive* BCTs require an active role of target individuals. There has been historical tension between these two schools of thought, however researchers now encourage the integration of both passive and active methods of intervention.[13] For example, the widespread installation of front seat airbags required simultaneous education of parents to keep small children in the back seat. Some have warned that active BCTs can result in "blaming the victim." Messaging and outreach should take this concern into account by focusing on *empowering* individuals.

Policy-oriented Countermeasures

Many previous injury prevention interventions have been focused on the behavior of individuals that put them at risk. However, due to success with policy-oriented countermeasures it is also useful to think about how individuals can be advocates for change at within their own communities. This requires increasing education of policy changes relating to injury prevention for the general public.[14] The next two sections on ecological models describe how behavior change requires multiple levels of influence within and between individuals as well as with policies and organizational change within communities.

Ecological Models

Ecological models assume that health and well being are affected by the dynamic interaction of biology, behavior, and the environment, which unfolds over the life of individuals, families, and communities. These models also assume that demographics factors such as age, gender, race, ethnicity, and socioeconomic differences directly affect individual functioning and influence risks and resources.[15] These models reflect the importance of both individual and community level behavior change factors.

At the beginning of this century, the Institute of Medicine and US National Academy of Sciences commissioned two committees on the role of behavioral science in public health. Both committees emphasized the role of ecological models and provided foundational frameworks for how they should be integrated in practice.

Ecological Models in Action

Two key concepts of ecological models in practice are that (1) behavior affects and is affected by multiple levels of influence, and (2) individual behavior shapes and is shaped by the social environment.[16]

The levels of influence on behaviors are as follows:[17]

---

[13] Green and Kreuter, p. 23; McGinnis et al., p. 24
[14] Gielen and Sleet, p. 66
[15] Smedley and Syme, p. 2-3
[16] Rimer and Glanz, p. 10
[17] McLeroy et al., p. 4

Level of influence	Definition
Individual	
Intrapersonal	Individual characteristics that influence behavior, such as knowledge, attitudes, beliefs, and personality traits
Interpersonal	Interpersonal processes and primary groups, including family, friends, and peers that provide social identity, support, and role definition
Community	
Institutional Factors	Rules, regulations, policies, and informal structures, which may constrain or promote recommended behaviors
Community Factors	Social networks and norms, or standards, which exist as formal or informal among individuals, groups, and organizations
Public Policy	Local, state, and federal policies and laws that regulate or support safer behavior

Each level of influence can affect behavior. For example, a young man may be speeding because it gives him a greater sense of confidence (intrapersonal). His friends encourage him to speed and speeding gives him greater status within his friend group (intrapersonal and community). Understaffing of the local police department means he is less likely to get pulled over (institutional), and a failure to update speed zones means that speeding laws can't be enforced (policy).

The second key concept in ecological models says that individuals influence and are influenced by those around them. For example, the girlfriend of the young man who was speeding encourages him to slow down; this behavior changes the social norm of his friend group, ultimately changing the speeding habits of his friends as well. This same model can be also applied to reinforce positive behavior.

Individual-Level Behavior Change Theories

Below are five widely recognized individual-level behavior change theories that can be applied to injury prevention behavior change.

<u>Health Belief Model</u>

The Health Belief Model (HBM) is one of the oldest and most widely recognized health related behavior change theories. First developed in the 1950's, the theory has evolved into the following basic premises:

An individual will engage in preventative or safer behaviors if the following conditions are met:[18]

[18] Rimer and Glanz, p. 13

- Believe they are susceptible to the condition (perceived susceptibility)
- Believe the condition has serious consequences (perceived severity)
- Believe taking action would reduce their susceptibility to the condition or its severity (perceived benefits)
- Believe costs of taking action (perceived barriers) are outweighed by the benefits
- Are exposed to factors that prompt action (e.g., a television ad) (cue to action)
- Are confident in their ability to successfully perform an action (self-efficacy)

This model is useful in prioritizing resources toward the areas with the biggest deficits. The frequently cited Vision Zero statistic that a pedestrian has a 90 percent chance of survival if hit by a car going 20 mph, and a 10 percent survival at 40 mph tries to address the perceived severity of a particular action. Focus groups and surveys would help identify how to prioritize these variables.

Theory of Planned Behavior

The Theory of Planned Behavior states that behavioral intention--to what degree an individual intends to do something--is the most important factor in predicting their actual behavior. Behavioral intention is influenced by:

- The individual's attitudes and beliefs about the behavior (e.g. wearing a seat belt is a smart thing to do);
- The individual's beliefs about whether people who are important to them approve or disapprove of the behavior (e.g. my mother likes when I wear a seatbelt);
- The individual's belief that they can do the behavior (e.g. I can easily put on a seatbelt)

Using this framework, media content might seek to address cultural norms around a particular behavior. For example, the New Zealand anti-speeding "pinkie" campaign, which received worldwide recognition, flipped the narrative from speeding being a "cool" behavior to one of obvious overcompensation.

Stages of Change (Transtheoretical) Theory

The Stages of Change Theory argues that behavior change is not a singular event, but instead happens in non-linear, repeating stages. One may enter the process at any stage and continue cycling between stages in any order until the behavior is changed.

Stage	Definition	Potential Strategies
Precontemplation	Has no intention of taking action within the next six months	Increase awareness of need for change; personalize information about risks and benefits
Contemplation	Intends to take action in the next six months	Motivate; encourage making specific plans
Preparation	Intends to take action within the next thirty days and has taken some behavioral steps in this direction	Assist with developing and implementing concrete action plans; help set gradual goals
Action	Has changed behavior for less than six months	Assist with feedback, problem solving, social support, and

		reinforcement
Maintenance	Has changed behavior for more than six months	Assist with coping, reminders, finding alternatives, avoiding slips/relapses (as applicable)

The theory highlights the necessity for a consistent, long-term education and outreach strategy with repeated messaging.

Applied Behavioral Analysis

A subfield within psychology, Applied Behavioral Analysis seeks to address the ABCs of behavior--antecedents, behavior, and consequences. Basic principles of feedback, punishment, stimulus, etc. are present in forming and stopping behaviors. The table below exemplifies Applied behavioral analysis applied to drinking and driving.

	Drinking and driving	Potential countermeasures
Antecedents	Environmental cues, social pressure	Selecting designated driver, lessening alcohol advertisements
Behaviors	Frequency of drinking, size of typical drink consumed, time between drinking and driving	Training bartenders, having BAC readers at bars
Consequences	Social reaction, punishment	Social reinforcement for not drinking and driving, penalties for being caught

Applied behavioral analysis has been successfully used in increased use of safety belts and child restraints, reduced vehicle speeding, improved child pedestrian safety and bicycle helmet use, reduced impaired driving, improved the safe driving practices of pizza deliverers, and reduced driver errors.[19]

Social Cognitive Theory

Social Cognitive Theory (SCT) describes behavior changes as the result of a dynamic and continuous interaction of personal factors, environmental factors, and human behavior. The three most important factors to an individual changing a behavior:

- Self-efficacy (belief that they can)
- Goals
- Outcome expectancies

According to SCT, an individual's behavior changes their environment and vice versa. Behaviors are learned through watching the behaviors and outcomes of others, and personal behaviors can be influenced by providing reinforcements (rewards, punishments).

Integrating the Individual-Level Behavior Change Theories

[19] Gielen and Sleet, p. 69

Surveying the most widely accepted individual-level behavior change theories, experts agreed upon eight factors most pertinent to health-related and injury-risk behaviors. In action, these factors are:[20]

1. The person forms a strong positive intention or makes a commitment to perform the behavior.
2. There are no environmental barriers that make it impossible to perform the behavior.
3. The person possesses the skills necessary to perform the behavior.
4. The person believes that the advantages of performing the behavior outweigh the disadvantages.
5. The person perceives more normative pressure to perform the behavior than to not perform it.
6. The person perceives that performance of the behavior is consistent with his or her self-image or values.
7. The person's emotional reaction to performing the behavior is more positive than negative.
8. The person perceives that he or she has the capabilities to perform the behavior under different circumstances.

The first three are viewed as necessary and sufficient for a behavior to change, while the last five relate to the strength and direction of an individual's intentions.[21]

Community-Level Behavior Change Theories

Below is an overview of community-level and communication behavior change theories and that can be applied to injury prevention behavior change.

Community Organization and other Participatory Models

The **community organization** approach focuses on the activation of communities to engage in social decision-making and problem solving. There is a focus on using "community representatives" and "local values" in accomplishing community goals. There is literature suggesting that for injury prevention programs in particular, it may be more effective to treat the community as the source and not simply the site of these programs.[22]

Community mobilization focuses on changing those economic and social structures that influence injury risk, and is more effective if including both bottom-up (grassroots) and top-down (formally initiated) strategies. The combination of community organizations and formal leadership provides a combination of engagement, resources, technical expertise, and local knowledge.[23]

The empowerment theory says that behavior change will be greatest when those whose behaviors are being targeted are directly involved in intervention planning and decisions making. This can be achieved through working with community coalitions and tailoring program components to different demographics.

The **community-based participatory research** school of thought argues that those being researched should take an active role in the research and subsequent program

[20] Fishbein, et al, p. 4
[21] Gielen and Sleet, p. 69
[22] Gielen and Collins; McLoughlin et al.
[23] Treno

implementation. It also supports extreme sensitivity to ethical issues around individual autonomy.

The Diffusion of Innovations Theory

This theory discusses how new ideas, products, and social practices are spread within and between societies. New ideas will be adopted in chronological segments: innovators, early adopters, majority early adopters, majority late adopters, and laggards. Ideas can be adopted more quickly throughout a community or society by maximizing the following factors:

- The relative advantage of an innovation shows its superiority over whatever it replaces
- Compatibility is an appropriate fit with the intended audience
- Complexity has to do with how easy it is to implement the innovation
- Trialability pertains to whether it can be tried on an experimental basis
- Observability reflects whether the innovation will produce tangible results

Communication Theory

Communication theory looks at how messages are created, transferred, received, and adopted, and can be applied specifically to how communication affects behavior change. Public safety communications "should represent an ecological perspective and foster multi-level strategies, such as tailored messages at the individual level, targeted messages at the group level, social marking at the community level, media advocacy at the policy level, and mass media campaigns at the population level."[24] However, these communications must also be supported in the physical environment in order to have lasting impact.

Media is a major part of any communications campaign seeking to change behavior, the two primary questions being:

1. What factors affect the likelihood that a person will be exposed to a given message?
2. How do media effects vary with the amount of exposure to that message?

The answers to these questions are affected by factors such as the characteristics of the target audiences, complexity of the issue, and competing messages. Repeated exposure through multiple channels may affect its impact on individuals. People will also learn from messaging in different ways and at different speeds:[25]

- Immediate learning: directly from the message
- Delayed learning: internalized sometime after the messaging
- Generalized learning: persuasion through messaging and related concepts
- Social diffusion: messages stimulate discussion among social groups and affect beliefs
- Institutional diffusion: messages garner a response from public institutions and enhance impact

Mass media can also help put a particular item on the public agenda by framing the conversation and thought topics of the public. While funding is often scarce for public safety campaigns, it can be stretched through using existing networks, in-kind donations, and earned media.

[24] Bernhardt
[25] Rimer and Glanz

Appendix B. Education and Outreach Materials

Based on interviewees' experiences and background research, below is a non-exhaustive list of suggested materials for Vision Zero education efforts that will be helpful in collaboration with community partners.

Updated websites:	Several interviewees suggested changes and additions to the current Vision Zero and Vision Zero Alliance websites, including: • Simpler, more publically accessible language on the city's Vision Zero website (for a public audience, avoid words like "prevalence, outcomes, data-driven") • Clear list of "call to action" steps for different community groups or segments (e.g. neighborhood councils, concerned resident, community-based organization, etc.) • Access to digital education curricula and marketing materials, some of which can be adapted to fit the particular context (i.e. for a non-PDF version contact _____) • More interactive, professional, and regularly updated Vision Zero Alliance website, with additional resources (videos, list of upcoming trainings), stories and pictures (can utilize social media with relevant hashtags), and opportunities for input
Digital curricula	Creating modifiable and digitally shareable curricula for various audiences will help disseminate the Vision Zero among different groups more effectively. These should include, but are not limited to: • "Train the trainer" - Lessons for community leaders looking to integrate Vision Zero into on the ground outreach and education • General public curriculum on the topics listed in the *Education topics* section, with segments for special populations and ready-to-go presentation materials for community meetings • "Brown-bag lunch" presentations for city agency and department officials to educate employees, with modifiable part for relation to their work • In-school curriculum/presentations that could be used by guest presenters or school teachers; should be segmented for elementary, middle, high school, and college ages *For more specifics on important topics, see the *education topics* section below.
Print materials	Print materials should include overviews of broader Vision Zero messaging as well as components that can be modified to specific communities or populations. These should include but are not limited to: • Infographics (broader VZ messaging) and infographic templates to be modified for specific geographic areas/demographics • Posters, fliers, banners, etc. (LADOT should develop a "style guide" similar to NYCDOT's in order to keep logos and branding consistent across materials that may be individualized for particular groups) • Bumper stickers approved by the city council to be put on all city vehicles

Short videos	A few short, engaging videos that overview the Vision Zero core messages may be costly to produce but are one of the most effective tools for getting attention. They could be used effectively in conjunction with the curricula and presentations, or in the following outreach methods: • Opening up personal meetings with influential stakeholders who have little time (editorial boards, elected officials, etc.), to be followed by a conversation on how Vision Zero fits within their specific priorities • On the homepage of the Vision Zero and Vision Zero alliance websites • Sent out with newsletters to Neighborhood Council members or posted on blogs (e.g. Next Door)
Physical incentives	Physical incentives will be important resources to attract the public to community events, and can also be used to gain engagement through other mediums. These could include but are not limited to: • Bicycle helmets • Reflective gear for walking and riding bicycles at night • Food • Dashboard cell phone holder (could be an incentive for completing an online survey or watching a safety video, etc.) • Bumper stickers

Appendix C. Partner-Specific Considerations

Below are potential partners who may have alignment with the Vision Zero mission and/or priorities. Each group contains possible advantages, considerations, and challenges to working with these groups identified by interviewees.

<u>Council District Offices:</u>

Advantages:

- Can reach small groups of constituents by integrating Vision Zero messaging into current outreach efforts
- Can take advantage of ongoing controversies around traffic-related issues to garner more attention to Vision Zero
- Have more awareness of the barriers and tailoring needs for different neighborhoods (e.g. suburban/urban, residential/commercial/industrial, income-levels, etc.)
- Can gain community credibility by demonstrating and integrating specific knowledge of a broad array of community issues as well as the demographics characteristics of different geographic areas in their district

Considerations:

- Will need to understand how Vision Zero aligns with their particular offices' priorities and constituent concerns

Barriers:

- May have trouble garnering attention and support from constituents who are not already engaged in public issues.

<u>Faith-based organizations:</u>

Advantages:

- Have strong trust and credibility with a particular subset of a community
- Can be a trusted source in areas with "anti-establishment" sentiments
- Have a natural alignment with Vision Zero mission of protecting life

Considerations:

- Successful partnerships will often rely on the individual relationship with the religious leader(s) of the organization

Barriers:

- May be reluctant to help with a particular initiative for fear of "opening the floodgates" to many others

Media:

Advantages:

- Have the power to reach community members with varying types of influence
- Have an aligned interest in prioritizing issues of public safety
- Have a wide audience for editorial pieces that can influence the Vision Zero brand and affect its prominence in public discussion
- Television media may have ad space to donate for public service announcements
- Opportunity for gaining earned media through alternative campaigns and op-ed contributions

Considerations:

- Successful partnerships will rely on personal relationships with leadership and/or reporters in related issue/geographic areas)
- Should take advantage of any possible connections from the "Watch the Road" campaign

Barriers:

- May publish unfavorable editorials or reporting on Vision Zero to a wide public audience

Neighborhood Councils:

Advantages:

- Can demonstrate knowledge of specific places to gain credibility
- Have demonstrated some level of active engagement in the public sphere
- Have established networks of communication through the Dept. of Neighborhood Empowerment (website, liaison model, social media, NC monthly profiles, DONE newsletter, etc.)

Considerations:

- Will be more willing to participate if they feel empowered to take charge of helping their own community -- need action items (particularly with liaison model)
- Some councils are significantly more engaged than others and have different roles/levels of influence within their communities (DONE can give insight into specifics)

Barriers:

- Engaging individually with all 96 neighborhood councils will be extremely resource-intensive
- May have trouble reaching members of the community who are not already aware of their presence or actively involved in the community

Nonprofits/Vision Zero Alliance (VZA)

Advantages:

- Organizations with sustained relationship and trust within a particular community will be effective allies in reaching those with distrust of government
- Have the ability and expertise to relate mobility issues to other areas of concern (employment, poverty, etc.)
- Can incorporate Vision Zero messaging and education into current efforts

Considerations:

- VZA leadership sees an ideal function as a coalition-style council with diverse group of on-the-ground experts and full-time staff to help implement Vision Zero and keep city accountable to Action Plan; would like to have access to best practices research and staff to help with production/design/storage
- Need funding to do outreach for Vision Zero
- Direct service organizations are effective partners at reaching less publically-engaged populations

Barriers:

- Have some historical tension between different active transportation advocacy groups

Private sector:

Advantages:

- Can effectively target specific populations based on consumer habits (e.g. a company that does mail order deliveries to Mexico can target Mexican immigrants of multiple generations)
- Can be effective partners without needing government resources for advertising (particularly those interested in associating their brand with public safety or community service)
- Creative media private sector partnerships may be more difficult to secure, but can provide opportunities to help creatively frame messaging/bring message to a wider audience

Considerations:

- Public private partnerships need to emphasize consistency of Vision Zero core messages
- Have opportunities for partnerships with large companies (AARP, AAA, car insurance companies) and small businesses (local "staples", those who will benefit from safer pedestrian environment) that have aligned

Barriers:

- Business owners may be against infrastructure improvements that may negatively affect (or that they perceive will negatively affect) their business

Schools:

Advantages:

- Can be ready partners for Vision Zero efforts, particularly those in HIN areas
- LAUSD requires their schools to make a new School Safety Plan every year on any topic of choice. These safety plans are crafted by parent committees, and make a natural pairing for Vision Zero outreach efforts.

Considerations:

- Vision Zero messaging will be most effective if it's incorporated directly into the safety curriculum (Safe Routes to School had success working with LAUSD on this)
- Using competitions, highlighting innovative ideas, and finding popular teachers who have connections with student leaderships are tactics to increase student engagement
- May require trusted partners in schools to get to parents who have sensitivity to working with government entities (e.g. immigration status)

Barriers:

- Traffic safety messaging may have to compete with other safety efforts to address things like prostitution, drugs, or violence
- It will be hard to get in-classroom time devoted to Vision Zero education without integration into curriculum/previously designated safety curriculum

Other Cities:

Advantages:

- Some cities have valuable knowledge and resources from experiences doing similar public outreach campaigns (e.g. West Hollywood's crosswalk campaign and communications toolkit)
- May want to adopt Vision Zero messaging and materials because of their aligned interest in public safety and Vision Zero's attraction as a regional issue
- Have the ability to use free ad space (street banners, PSAs, etc.)

Considerations:

- Are important partners in Vision Zero gaining traction as a regional issue and because of the amount of commuter traffic from outside the city of Los Angeles

Barriers:

- May have traffic priorities that do not align with Vision Zero goals or not want to contribute resources because Vision Zero is an LA city-driven initiative

Other Los Angeles City Agencies/Departments:

Advantages:

- Some departments have already expressed interest in being a Vision Zero partner because they have aligned interests in particular populations or issue areas (e.g. Dept. of Aging) or available communications resources (Dept. of Neighborhood Empowerment)
- May have the ability to devote significant ad space (e.g. Metro donated hundreds of bus and shelter ad spots to "Watch the Road" campaign)

Considerations:

- Are vital partners in the overall success of a cross-departmental initiative like Vision Zero and efforts need to be coordinated
- Need a reason to integrate Vision Zero mission into their own priorities

Barriers:

- May have no current work that aligns with Vision Zero priorities

Appendix D. Interview Questions and Themes

Current work

- Background on organizational mission, communities/populations/problems being addressed, scope, partners, etc.
- What work is the Alliance/your organization currently doing that is directly or indirectly related to Vision Zero?

Previous Campaigns:

- What kinds of public outreach strategies have you already employed? What was your most successful campaign and what made it so? How do you measure outcomes?
- What kinds of campaigns (internal or external) have targeted your community members in the past?
- On the spot recall: What campaigns have you seen that have really struck you personally?

Message Development Experience

- How do you identify and target people/groups based on "intangible" variables like "attitudes, value, and beliefs"?
- How do you develop messaging (focus groups, surveys, etc.)? What types of messaging have been most effective for what outcomes?
- What media platforms/outreach events work best with what type of messaging?

- How does communication change within different communities?
- What are the attitudes, value, and beliefs of your community members that you take into account in communication?
- What particular cultural (or other) considerations should be taken into account when reaching out to your community?
- What are barriers to effective communication with your community members?

Messaging Development Idea

- If we were to create a focus group for your community, who would be the best representatives?
- In terms of Vision Zero, what message would resonate most with you? With your community/constituency?
- If you had to come up with your own image or tagline for Vision Zero in the next minute, what would it be?
- What do you think drives dangerous traffic behavior within your constituency? What strategies could counteract this behavior or provide safer alternatives?

Message Platforms

- What types of traditional media purchasing have you found to be most effective?
- How have you been able to get "earned media"?
- What effective non-traditional platforms have you seen/tried?